

**Quarterly Report and Workplan  
Report No. 25  
January - March, 1992**

**Agricultural Management Support Services Contract  
(Contract No. 386-0000-C-00-5039-00)  
Winrock International**

**May 21, 1992**

**INTRODUCTION:**

This report covers the period January 01 - March 31, 1992 which constitutes the twenty-fifth quarter since the MSS contract became operational on January 01, 1986.

The Agricultural Research Project (ARP) became operational in 1985 initially with only two subprojects, viz., Soybean Processing and Utilization (SPU) and Post Harvest Technology of Fruits and Vegetables (PHT-FV). Subsequently, more subprojects and pre-projects were added from time-to-time. It reached its fullest development in June, 1990 when it comprised ten subprojects and six pre-projects. The six pre-projects were formulated in March, 1990 through an agreement reflected in PIL 39 which was included as Annexure 9 in quarterly report No.17. This agreement provided for the preparation of a project design paper, implementation of some training activities and limited procurement of equipment in respect of each of three new subject matter areas, viz., Tissue Culture of Horticultural Crops (TCHC), Integrated Pest Management (IPM) and Animal Genetic Resource Conservation including Fish Genetic Resources (AGRC). The PIL 39 also provided some funds for similar purposes in respect of three other pre-projects, in the case of which the project design papers had been prepared earlier. Preparation of design papers in respect of two of these pre-projects, viz., On-Farm Water Management (OFWM) and Farm Machinery (FM) were funded under the budget of the Project Implementation Unit (PIU) functioning in ICAR. Design paper in respect of the third pre-project viz. Protected Cultivation and Green Houses (PCGH) was prepared by Dr. Dave Mears, a then USAID staff.

After the April-June 1990 quarter, the ARP started scaling down as individual constituent subprojects started completing their designated life span. Under the Plant Genetic Resources (PGR) no activity was undertaken after June, 1990. The Forestry Faculty Training (FFT) terminated on September 30, 1990. Soybean Processing & Utilization (SPU) and Post Harvest Technology of Fruits and Vegetables (PHT-FV) terminated on March 31, 1991. Three animal science subprojects viz., Embryo Transfer Technology (ETT), Conversion of Bio-degradable Animal Wastes (CBAW) and Intra-cellular Blood Protista (IBP) completed their designated life span on March 31, 1992. The remaining two subprojects, viz., Agroforestry (AGROFOR) and Agrometeorology (AGROMET) as well as all

the six pre-projects would complete their designated life span on June 30, 1992 when the ARP itself would come to a close. The life span and current funding status of the ARP, the MSS, the subprojects and the pre-projects are given in Table 1.

**TABLE 1. LIFE SPAN OF ARP, MSS, SUB-PROJECTS AND PRE-PROJECTS**

<b>Sl.No.</b>	<b>Units</b>	<b>Starting Date</b>	<b>Termination Date</b>	<b>Life of Project Budget</b>
1.	ARP	June 30,1983	June 30,1992	20,000,000
2.	SPU	Nov. 20,1984	Mar. 31,1991	1,743,075
3.	PHT-FV	Jan. 25,1985	"	2,996,092
4.	MSS	Sept.30,1985	June 30,1992	3,869,878
5.	PIU	Mar. 16,1986	June 30,1992	947,602
6.	FFT	Apr. 28,1986	Sept.30,1990	3,181,387
7.	IBP	Nov. 26,1986	Mar. 31,1992	1,315,485
8.	ETT	Jan. 09,1987	"	1,141,070
9.	CBAW	Jan. 21,1987	"	1,104,441
10.	PGR *	July 01,1987	June 30,1990	200,000
11.	AGROFOR	June 28,1988	June 30,1992	2,044,403
12.	AGROMET	July 26,1988	"	1,554,985
13.	IPM	Mar. 21,1990	"	150,000
14.	AGRC	"	"	150,000
15.	TCHC	"	"	150,000
16.	PCGH	"	"	150,000
17.	OFWM	"	"	150,000
18.	FM	"	"	150,000

\* After June 1990 activities under this sub-project have been undertaken through a PASA between USAID and USDA.

## THE MSS CONTRACT.

In report No.22 mention was made of the extension of the MSS to March 31, 1992. This extension through Amendment No.14 become fully operational on August 8, 1991. A copy of the accepted work plan along with Amendment No.14 was also annexed to Report No. 22.

This work plan envisaged the accomplishment of the following major tasks :

1. Ship to India, deliver to sites, and install in designated laboratories scientific equipment worth US\$886,165 (which included cost of freight, insurance, customs clearance and inland transportation at 24%) lying in the U.S.A. warehouse as on June 30, 1991.
2. Procure, ship, deliver to sites and install in designated laboratories new scientific equipment worth US\$375,000 (US\$225,000 + US\$150,000) to be procured after August 10, 1991. US\$225,000 represented cost of equipment yet to be procured under Agrometeorology, Agroforestry and Embryo Transfer Technology sub-projects while \$150,000 represented the cost of new equipment proposed under various pre-projects.
3. Arrange for providing 35.75 person-months of short-term consultancies involving 39 consultants [U.S.A. to India].
4. Arrange for providing 163.50 person-months of training programs involving 99 trainees [India to U.S.A].

The overall budget for the three line items, viz., Technical Assistance, Training and Commodities under various sub-projects and pre-projects during this extension (Amendment No.14) had been revised as below in Table 2.

TABLE 2. OVERALL BUDGET FOR TECHNICAL ASSISTANCE, TRAINING AND COMMODITIES PER AMENDMENT NO.14.

Sub-projects/ Pre-projects	Estimated through June 30,'91	Estimated Jul.1, '91 to March 31,'92	Total estimated through March 31, 1992
Technical Assistance	1,089,306	623,006	1,712,312
Training	3,040,141	1,076,710	4,116,851
Commodities	4,756,131	453,906	5,210,037
<b>TOTAL</b>	<b>8,885,578</b> =====	<b>2,153,622</b> =====	<b>11,039,200</b> =====

The technical assistance, training and procurement tasks of such magnitude were envisaged to be accomplished by a MSS project group that would be operating at considerably reduced strength. The Washington Office of the project has since been working under a half-time U.S. Project Coordinator while the New Delhi Office has been operating without an expatriate India Coordinator and is headed by a Scientist-in-Charge.

When Amendment No.14 was signed the level of effort envisaged was regarded as somewhat ambitious. Subsequently, it became apparent that several of the projected activities would spill over beyond March 31, 1992. A three-month no-cost extension of the MSS was, therefore, taken up for consideration by the project office in USAID.

This three-month, no-cost extension from April 01 to June 30, 1992 was eventually granted vide Amendment No.16. Amendment No.16 also further revised the workplan approved under Amendment No.14 to the extent that a 2-week Computer Awareness Training programme for 20 Indian scientists involving 10 person-months of training in India was added under the sub-project Agrometeorology.

Since Amendment No.16 had provided only a no-cost three-month extension, the overall budget for Technical Assistance, Training and Commodities as given in Table 2 has remained unchanged.

**Magnitude of Activities scheduled during the extension period  
July 1, 1991 to June 30, 1992:**

A Summary of Activities envisaged under the Amendment No.14 by subprojects/pre-projects is given in Table 3. The slight change in workplan due to the incorporation of the 2-week Computer Awareness Training programme is reflected in the revised workplan summarized in Table 3-a.

TABLE 3

## SUMMARY OF ACTIVITIES BY SUB-PROJECTS/PRE-PROJECTS SCHEDULED DURING JULY 01, 1991 - MARCH 31, 1992

BASED ON WORKPLAN DEVELOPED AND APPROVED UNDER AMENDMENT No.14 TO MSS CONTRACT

SUB-PROJECTS/ PRE-PROJECTS	TECHNICAL ASSISTANCE			TRAINING			COMMODITIES		ESTIMATED TOTAL COST	
	PM	FX	LC	PM	FX	LC	FX	LC	FX	LC
PIU	4	64	-	-	-	-	-	-	64	-
IBP	4	64	-	15.75	95	-	-	-	159	-
ETT	2	32	-	18.75	113	-	40	-	185	-
CBAW	3	48	-	0.75*	5	-	-	-	53	-
AGROFOR	3	48	-	21**	-	51	95	160	143	211
AGROMET	9	144	-	20	120	-	126	-	390	-
IPM	2	32	-	21	126	-	30	-	188	-
AGRC	2	32	-	9	54	-	55	-	141	-
TC	2	32	-	9	54	-	20	-	106	-
PC	0.50	8	-	15	110	-	5	-	123	-
DFWM	2	32	-	16	96	-	20	-	148	-
FM	2.25	36	-	17.25	103	-	-	-	139	-
<b>TOTAL</b>	<b>35.75</b>	<b>572</b>	<b>-</b>	<b>163.50</b>	<b>876</b>	<b>51</b>	<b>391</b>	<b>160</b>	<b>1,839</b>	<b>211</b>

\* Does not include 2 person-months of training of one participant who was then under training in the U.S.A.

\*\* Does not include 62 person-months of training of 6 participants who were there undergoing training in the U.S.A.

NOTE : Implementation of all the above activities was subject to :

(a) timely receipt of approval from ICAR/DARE/DEA and I.O's from USAID, and

(b) timely acceptance of placement of trainees and availability of U.S. consultants by concerned U.S. institutions.

Costs were estimated @ \$6,000 per person-month for training and \$16,000 per person-month of consultant services

TABLE 3-a

## SUMMARY OF ACTIVITIES BY SUB-PROJECTS/PRE-PROJECTS SCHEDULED DURING JULY 01, 1991 - JUNE 30, 1992

BASED ON WORKPLAN DEVELOPED AND APPROVED UNDER AMENDMENT No.16 TO MSS CONTRACT

SUB-PROJECTS/ PRE-PROJECTS	TECHNICAL ASSISTANCE			TRAINING			COMMODITIES		ESTIMATED TOTAL COST	
	PM	FX	LC	PM	FX	LC	FX	LC	FX	LC
PIU	4	64	-	-	-	-	-	-	64	-
IBP	4	64	-	15.75	95	-	-	-	159	-
ETT	2	32	-	18.75	113	-	40	-	185	-
CBAW	3	48	-	0.75*	5	-	-	-	53	-
AGROFOR	3	48	-	21**	-	51	95	160	143	211
AGROMET	9	144	-	30	120	16***	126	-	390	-
IPM	2	32	-	21	126	-	30	-	188	-
AGRC	2	32	-	9	54	-	55	-	141	-
TC	2	32	-	9	54	-	20	-	106	-
PC	0.50	8	-	15	110	-	5	-	123	-
DFNM	2	32	-	16	96	-	20	-	148	-
FARM MACH	2.25	36	-	17.25	103	-	-	-	139	-
<b>TOTAL</b>	<b>35.75</b>	<b>572</b>	<b>-</b>	<b>173.50</b>	<b>876</b>	<b>67</b>	<b>391</b>	<b>160</b>	<b>1,839</b>	<b>211</b>

\* Does not include 2 person-months of training for Dr.Paliwal who departed to USA on March 14, 1991 and returned to India on August 31, 1991

\*\* Does not include 62 person-months of training of 6 participants who were then undergoing/completed training in the U.S.A.

	Departure	Arrival
M.M. Roy / S.P. Singh	Sept. '90	Dec. '91
N.K.Sharma / V.K.Monga / G.Singh	Jan. '91	June. '92
S.K. Dhyani	Jan. '91	Feb. '92

\*\*\* No new funds had been provided for this activity.

NOTE : Implementation of all the above activities was subject to :

- timely receipt of approval from ICAR/DARE/DEA and I.O's from USAID, and
- timely acceptance of placement of trainees and availability of U.S. consultants by concerned U.S. institutions.

Costs were estimated @ \$6,000 per person-month for training and \$16,000 per person-month of consultant services

**Total estimated MSS expenditure levels from September 30, 1985 to June 30, 1992.**

These estimates are given in Table 4.

**TABLE 4. ESTIMATED MSS EXPENDITURE LEVELS FROM SEPT.30, 1985.<sup>1/</sup>  
In Dollars ('000)**

Sub-PROJ./ PRE-PROJ.	Technical Assistance			Training			Commodities
	Cumulative Total to June, '92			Cumulative Total to June, '92			Cumulative Total to June, '92
	Pers.	Pers. Mths.	Cost	Pers.	Pers. Mths.	Cost	Cost
SPU	9	9	154	27	72	388	641
PHT-FV	13	13	242	36	120	716	1,326
PIU	50	37	627	13	9	81	2
FFT	*	*	*	72	864	3,319	**
IBP	10	14	171	15	41	266	752
ETT	8	5	109	18	26	226	350
CBAW	12	10	206	25	91	449	485
PGR	10	5	74	11	17	119	**
AGROFOR <sup>2/</sup>	20	13	272	66	254	911	618
AGROMET <sup>3/</sup>	17	11	194	37	84	408	920
IPM	-	-	-	10	16	110	37
AGRC	3	3	39	7	9	75	41
TCHC	3	2	24	9	16	112	33
PCGH	1	0.5	11	4	12	74	34
OFWM	2	2	33	7	10	101	20
FM	1	1	16	9	14	96	**
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	159	125.5	2,172	366	1,655	7,451	5,259
	===	=====	=====	===	=====	=====	=====

\* No consultancies were planned.

\*\* No equipment was planned.

<sup>1/</sup> This table is based on March 31, 1992 data for training and T.A. It includes programs actually initiated by or before April 01, 1992 plus those planned to be initiated during the period April 01, 1992 to June 30, 1992. In all cases the full number of person-months and dollar costs are shown in the month the appointment is made.

<sup>2/</sup> AGROFOR includes in-country training for 41 participants.

<sup>3/</sup> AGROMET includes in-country training for 20 participants.

**Level of Funding for Technical Assistance, Training, and Commodities for the various sub-projects/pre-projects during the period July 1, 1991 to June 30, 1992.**

The estimated level of funding for Technical Assistance, Training, and Commodities for various sub-projects/pre-projects is given in Table 5.

**TABLE 5. ESTIMATED LEVEL OF FUNDING DURING THE EXTENSION PERIOD JULY 01, 1991 TO JUNE 30, 1992.**

(\$'000)

<b>Subproject/ Preproject</b>	<b>Tech.Asst.</b>	<b>Training</b>	<b>Eqpt.</b>	<b>Total</b>
ARP EVAL.	-	-	-	-
SPU	-	-	-	-
PHT-FV	-	-	-	-
PIU	65	-	-	65
IBP	47	106	-	153
ETT	24	105	11	140
CBAW	80	-	-	80
AGROFOR	-	43	68	111
AGROMET	101	102	37	240
PRE-PROJ <sup>1/</sup>	85	366	169	620
	-----	-----	-----	-----
	402	722	285	1,409
	=====	=====	=====	=====

<sup>1/</sup> Includes all the six pre-projects.

**Local currency costs of the MSS contract operations in India:**

The direct dollar costs which are accounted for by the Washington Office are reported through USAID Washington channels. The local currency costs of Winrock International, Delhi Office are given in Table 6.

TABLE 6. USAID INPUTS INTO THE RUPEE COSTS OF THE MSS CORE CONTRACT THROUGH MARCH, 1992 AND PROJECTIONS FOR THE PERIOD APRIL THROUGH JUNE, 1992.

(\$'000)

CORE COSTS	LOP	Cum Exp. <sup>1/</sup> thru Mar.'92	Progress Jan. thru Mar.'92	Plans Apr. thru Jun.'92
A.1 Salaries		212	20	8
A.4 Travel Trans- portation & Per Diem		21	-	9
A.5 Allowances		133	-	-
A.6 Other direct costs		299	10	6
A.7 Commodities		50	-	-
<b>TOTAL</b>	<b>---</b>	<b>715</b>	<b>30</b>	<b>23</b>
	<b>===</b>	<b>====</b>	<b>===</b>	<b>===</b>

<sup>1/</sup> Consists of actual expenditures of WI/Delhi office only.

#### AGRICULTURAL RESEARCH PROJECT (ARP).

##### Technical Assistance, Training and Commodity Procurement

The overall tempo of implementation of project activities during the January-March, 1992 quarter shows an improvement over the level achieved during October-December, 1991 quarter largely due to higher commodity procurement. However, there was a small decrease under Technical Assistance and a modest increase under Training.

##### Level of Implementation of Project Activities

Beginning with the quarterly report No.20 we had introduced tabulation of actual financial disbursements as a measure of gauging the level of implementation of project activities. It has been continued in the present report No.25.

Table 7 presents quarter-by-quarter expenditure by line items as well as totals since February 1989 when the MSS contract was revised, up until March 31, 1992. It may be pointed out that these data are not exactly comparable directly with those used in other Tables in this report since the other Tables generally include a combination of funds committed for specific activities as well as actual costs already incurred. For regular management purposes we budget for an agreed upon activity at the time it commences even though funds may be disbursed later at one time or over a period of time. By doing this we ensure that the needed funds will be available for doing the specific job and unused available funds will be allocated to other agreed upon activities. All the Tables in this report except Table 7 contain to some degree a combination of funds committed for specific activities and of actual expenses incurred. Thus these Tables will, almost invariably, show a higher monetary figure than actual disbursements made during the same period.

**TABLE 7. SUBPROJECT EXPENDITURE BY LINE ITEMS - FEBRUARY, 1989 THROUGH MARCH, 1992. (\$)**

Quarter	Tech.Asst.	Training	Commodities	Total
Feb-Mar 1989	11,900.14	82,652.04	148.21	94,700.39
Apr-Jun 1989	18,168.75	118,261.50	0.00	136,430.25
Jul-Sep 1989	50,638.22	193,309.12	9,578.07	253,525.41
Oct-Dec 1989	30,132.27	348,967.95	78,969.32	458,069.54
Jan-Mar 1990	79,411.24	426,280.45	309,417.29	815,108.98
Apr-Jun 1990	208,986.06	324,744.91	376,208.97	909,939.94
Jul-Sep 1990	52,605.16	466,849.43	775,404.62	1,294,859.21
Oct-Dec 1990	172,776.17	333,470.06	1,416,149.97	1,922,396.20
Jan-Mar 1991	94,798.15	283,763.12	287,406.36	665,967.63
Apr-Jun 1991	149,650.07	260,963.94	824,757.63	1,235,371.64
Jul-Sep 1991	28,029.79	209,197.68	58,359.30	295,586.77
Oct-Dec 1991	127,873.54	126,951.89	49,900.72	304,726.15
Jan-Mar 1992	100,499.18	171,438.68	166,262.66	438,200.52
<b>TOTAL</b>	<b>1,125,468.74</b>	<b>3,346,850.77</b>	<b>4,352,563.12</b>	<b>8,824,882.63</b>

**Technical Assistance.**

Table 8. Summarises consultancies accomplished to december 31 1992, actuals accomplished during January-March, 1992 quarter and projections for the April-June 1992 quarter.

10 consultants, totalling 10.5 person-months were scheduled during January-March, 1992 quarter. Instead, 7 consultants totalling 7 person-months were brought.

During the April-June quarter, six more consultants involving four person-months are scheduled to come.

**TABLE 8. U.S. SCIENTISTS COMING TO INDIA. (NUMBERS OF PERSONS, PERSON-MONTHS AND ESTIMATED COSTS)**

Sub-proj/ Pre-proj	Total		Actuals		Projection		Estimated Cumulative		
	to Dec.'91		Jan-Mar 1992		Apr-June 1992		Total to June, 1992		Cost
	Nos.	PM	Nos.	PM	Nos.	PM	Nos.	PM	(\$'000)
SPU	9	9	-	-	-	-	9	9	154
PHT-FV	13	13	-	-	-	-	13	13	242
PIU	50	37	-	-	1	1	51	38	633
IBP	10	14	-	-	-	-	10	14	171
ETT	8	5	-	-	-	-	8	5	109
CBAW	11	9	1	1	-	-	12	10	206
PGR	10	5	-	-	-	-	10	5	74
AGROFOR	18	12	-	-	2	1	20	13	272
AGROMET	13	8	2	2	2	1	17	11	194
IPM	-	-	-	-	-	-	-	-	-
AGRC	-	-	2	2	-	-	2	2	33
TCHC	3	2	-	-	-	-	3	2	24
PCGH	1	0.5	-	-	-	-	1	0.5	11
OFWM	-	-	2	2	-	-	2	2	33
FM	-	-	-	-	1	1	1	1	16
<b>Total</b>	<b>146</b>	<b>114.5</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>4</b>	<b>159</b>	<b>125.5</b>	<b>2172</b>
	===	=====	===	===	==	=====	===	=====	=====

**Training.**

Table 9 summarises training commitments. It shows what was accomplished to December 1991, what took place in the January-March, 1992 quarter, and projections during April-June, 1992 quarter. Ten trainees involving 25 person-months were sent to the U.S.A. during the quarter just ended. Of the 10 trainees, six were under ETT and four under TCHC. 20 scientists who were scheduled to undergo a 2-week training in the use of computers during January-March, 1992 could not do so due to unavoidable delay. They will

now receive training during April. The heavy schedule of training projected during the April-June, 1992 quarter reflects an attempt to complete all the remaining trainings before June 30 1992 when the ARP comes to a close.

**TABLE 9. COMMITMENTS<sup>1/</sup> FOR INDIAN SCIENTISTS GOING TO THE U.S. (NUMBERS OF PERSONS, PERSON-MONTHS AND ESTIMATED COSTS)**

Sub-proj/ Pre-proj	Total to Dec.'91		Actuals Jan-Mar 1992	Projection Apr-June 1992		Estimated Cumulative Total to June, 1992			
	Nos. PM		Nos. PM	Nos. PM		Nos. PM		Cost (\$'000)	
SPU	27	72	-	-	-	-	27	72	388
PHT-FV	36	120	-	-	-	-	36	120	716
PIU	13	9	-	-	-	-	13	9	81
FFT	72	864	-	-	-	-	72	864	3319
IBP	15	41	-	-	-	-	15	41	266
ETT	12	13	6	13	-	-	18	26	226
CBAW	25	91	-	-	-	-	25	91	449
PGR	11	17	-	-	-	-	11	17	119
AGROFOR <sup>2/</sup>	66	254	-	-	-	-	66	254	911
AGROMET <sup>3/</sup>	17	74	-	-	20	10	37	84	408
IPM	7	14	-	-	3	2	10	16	110
AGRC	4	3	-	-	3	6	7	9	75
TCHC	3	2	4	12	-	-	7	14	82
PCGH	4	12	-	-	5	4	9	16	104
OFWM	-	-	-	-	7	10	7	10	101
FM	-	-	-	-	9	14	9	14	96
<b>Total</b>	<b>312</b>	<b>1586</b>	<b>10</b>	<b>25</b>	<b>47</b>	<b>46</b>	<b>369</b>	<b>1657</b>	<b>7451</b>
	====	====	==	===	===	==	===	====	=====

<sup>1/</sup> All the months of training are included in the period in which the appointment was made even though the training might extend into the following periods.

<sup>2/</sup> AGROFOR includes in-country training for 41 participants.

<sup>3/</sup> AGROMET includes in-country training for 20 participants.

<sup>4/</sup> 23 trainees left as per schedule. Clearance of 8 more trainees are in process by GOI.

### Procurement.

Table 10 summarises the status of commodity procurement as of March 31, 1992. Equipment worth \$4,452,663 had been delivered in India while equipment worth \$433,227 was still lying in the warehouse in USA. Equipment worth \$96,004 has recently been contracted while equipment worth \$20,000 was being sourced. A sum of \$655,659 was thus available for new procurement but a large part of it is unlikely to be used mainly for paucity of time for effective completion of procurement operations.

TABLE 10. SUMMARY STATUS OF PROCUREMENT AS OF MARCH 31, 1992

	A	B	C	D	E	F	G	H	I
SUB.PROJ./ PRE-PROJ.	COMMODITY BUDGET	SHELADIA FEE	EFFECTIVE BUDGET	DELIVERED IN-COUNTRY	M.HOUSE U.S.A	CONTRACTED	EQPT. BEING SOURCED	TOTAL D+E+F+G	DIFFERENCE C-H
SPU	644,000	28,389	615,611	610,768	0	0	0	610,768	4,843
PHT-FV	1,331,000	83,113	1,247,887	1,254,446	0	0	0	1,254,446	(6,559)
IBP	825,000	56,515	768,485	531,866	180,332	0	0	712,198	56,287
ETT	653,000	44,930	608,070	322,780	8,308	0	0	331,088	276,982
CBAM	499,000	34,559	464,441	461,573	0	0	0	461,573	2,868
AGROFOR	927,180	71,121	856,059	467,474	121,493	0	0	588,967	267,092
AGROMET	990,225	63,225	927,000	803,756	66,712	15,307	0	885,775	41,225
IPM	30,000	0	30,000	0	35,550	0	0	35,550	(5,550)
AGRC	55,000	0	55,000	0	20,832	18,052	0	38,884	16,116
TCHC	20,000	0	20,000	0	0	30,826	0	30,826	(10,826)
PCGH	25,000	0	25,000	0	0	31,819	0	31,819	(6,819)
OFWM	20,000	0	20,000	0	0	0	20,000	0	20,000
TOTAL	6,019,405	381,852	5,637,553	4,452,663	433,227	96,004	20,000	4,981,894	655,659

NOTES

1. THE FIGURES IN THE TABLE ARE INCLUSIVE OF 24% ESTIMATED FOR WAREHOUSING, FREIGHT, INSURANCE, CLEARING AND-INLAND TRANSPORTATION.

2. THE PRICE OF THE COMPUTERS WHICH IS \$77,000 AND \$198,000 IN SUBPROJECTS AGROFORESTRY AND AGROMETEOROLOGY RESPECTIVELY HAVE BEEN INCLUDED IN THE 'DELIVERED/IN-COUNTRY' CATEGORY AND DOES NOT INCLUDE PROCUREMENT FEE SINCE THE COMPUTERS WERE PURCHASED LOCALLY BY WINROCK INTERNATIONAL.

3. THE \$855,000 IN SUBPROJECT AGROFORESTRY INCLUDES \$170,000 FOR THE PROCUREMENT OF ADDITIONAL COMPUTERS WHICH SUBSEQUENTLY COULD NOT BE PROCURED DUE TO A TIME CONSTRAINT.

## Financial Status

Progressive Expenditure of USAID funds for the various sub-projects/Pre-projects is given in Table 11 and that of GOI in Table 12.

**TABLE 11. USAID INPUTS TO THE ARP THROUGH MARCH, 1992 AND PROJECTIONS FOR THE PERIOD APRIL TO JUNE, 1992. (\$'000)**

<u>Sub-proj/ Pre-proj</u>	<u>LOP Target</u>	<u>Cum Total <sup>1/</sup> thru Mar'92</u>	<u>Progress <sup>1/</sup> Jan-Mar'92</u>	<u>Plans <sup>6/</sup> Apr-Jun.'92</u>
SPU	1,771	1,824	-	-
PHT-FV	3,079	3,194	-	-
PIU	751 <sup>2/</sup>	717	-	6
FFT	3,400	3,319 <sup>3/</sup>	-	-
IBP	1,362	1,189	-	-
ETT	1,208	629	113	-
CBAW	1,129	1,140	16	-
PGR	200	193	-	-
AGROFOR	2,176	1,769	69	32
AGROMET	1,698	1,505	111	52
PRE PROJ: <sup>5/</sup>				
IPM	150	127	36	20
AGRC	150	73	41	43
TCHC	150	140	115	30
PCGH	150	128	24	-
OFWM	150	33	33	121
FM	150	-	-	115
MSS CORE COST		715 <sup>4/</sup>	30	23
<b>TOTAL</b>	<b>17,674</b>	<b>16,695</b>	<b>588</b>	<b>442</b>
	=====	=====	=====	=====

<sup>1/</sup> Consists of actual expenditures under D.Os and on-going I.Os plus reimbursement to ICAR for approved rupee expenditures. Values indicated in "cumulative/Mar'92" and "progress Jan.-Mar.,'92" columns include cost of items delivered into India and cost of items in the warehouse. 31% has been added to the cost of both categories of equipment, providing for freight, insurance, clearing, inland transportation and related costs @ 24% and for procurement fee @ 7% which reflects the additional funding provided for Sheladia sub-contract.

<sup>2/</sup> Includes \$100,000 for scientists exchange program approved through PIL No.23, issued on September 28, 1988.

<sup>3/</sup> Includes \$167,000 non-ARP funds provided under D.O.#41 for 1987-88 group of forestry faculty training.

<sup>4/</sup> Consists of expenditure of Delhi office only for the period Oct'85 through Mar'92. Of this total \$263,938 were paid from non-ARP sources. From Oct'88 through Mar.31,'92 a total of \$379,062 has been paid from ARP funds.

- 5/ Total USAID input for 6 preproject activities is \$900,000. (\$283,000 for technical assistance, \$467,000 for training and \$150,000 for commodities).
- 6/ Consists of cost of those commodities (plus 31%) contracted for and expected to be delivered in the warehouse (USA) during April-June, 1992.

**TABLE 12. GOI INPUTS TO THE ARP THROUGH DECEMBER, 1991 AND PROJECTIONS FOR THE PERIOD JANUARY TO MARCH, 1992.**

(Rs. '000)

Subproject	LOP Target	Cum Total thru Dec. '91	Progress Oct-Dec. '91	Plans Jan-Mar. '92
SPU <sup>2/</sup>	9,671	10,063	-	-
PHT <sup>2/</sup>	16,773	10,775	-	-
PIU	5,761	1,079	-	?
IBP	9,535	9,328	515	?
ETT	10,190	9,539	410	370
CBAW	11,962	9,105	-	-
PGR	-	-	-	-
AGROFOR	29,223	? <sup>1/</sup>	? <sup>1/</sup>	? <sup>1/</sup>
AGROMET	10,234	10,647	610	640
<b>TOTAL</b>	<b>103,349</b> =====	<b>60,536</b> =====	<b>1,535</b> =====	<b>1,010</b> =====

<sup>1/</sup> Agroforestry expenditure details have not yet been provided by ICAR.

<sup>2/</sup> SPU and PHT expenditure is as of Mar 31 '91 since this being the termination date of the subprojects.

#### SUB-PROJECTS/PRE-PROJECTS

##### 1. Soybean Processing and Utilization (SPU).

Commitments of fresh USAID inputs to this sub-project ended on March 31, 1991 after a life span of more than six years. No consultancies or trainings were planned during the January-March, 1992 quarter.

Progressive expenditure of USAID funds for the SPU sub-project is given in Table 13 and that of GOI in Table 14.

TABLE 13. USAID INPUTS INTO SOYBEAN PROCESSING AND UTILIZATION THROUGH MARCH, 1992 AND PROJECTIONS FOR THE QUARTER APRIL-JUNE, 1992.

(\$ '000 and Rs. '000).

Component	LOP Target		Cum Total <sup>1/</sup> thru Mar. '92		Progress <sup>1/</sup> Jan.-Mar. '92		Plans Apr-Jun '92	
	\$	Rs.	\$	Rs. <sup>4/</sup>	\$	Rs. <sup>4/</sup>	\$	Rs.
U.S. Scientists to India	210	-	154	-	-	-	-	-
Indian Scientists to U.S.	361	-	388	-	-	-	-	-
Workshop, etc. in India	-	415	-	88	-	-	-	-
Workshops, Conferences, outside India	14	-	-	-	-	-	-	-
Equip: Imported	644	-	641 <sup>3/</sup>	-	-	-	-	- <sup>4/</sup>
Local	-	2742	-	2016	-	-	-	-
Op. Research	-	853	-	355	-	-	-	-
Staff Salaries	-	3637	-	3217	-	-	-	-
Mtc. of Res. equipment	-	1725	-	411	-	-	-	-
	<u>1229</u>	<u>9372</u>	<u>1183</u>	<u>6087</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<b>TOTAL (\$)</b>	<b>1229</b>	<b>542</b>	<b>1183</b>	<b>641</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
	=====	=====	=====	=====	=====	=====	=====	=====
<b>Combined (\$)</b>	<b>1771</b>		<b>1824</b>		<b>-</b>		<b>-</b>	

<sup>1/</sup> Consists of actual expenditures under on-going activities, plus reimbursement to ICAR for approved rupee expenditures. Values indicated in "cumulative/Mar.'92" include cost of items delivered into India. 31% has been added to the cost of equipment, providing for freight, insurance, clearing, inland transportation, and other related costs @ 24% and for procurement fee @ 7% which reflects the additional funding provided for the Sheladia sub-contract.

<sup>2/</sup> Rupee expenditure is as of Mar.31,'91 as per the Quarterly Report received from ICAR.

<sup>3/</sup> The cumulative total for imported equipment reflects an actual freight of \$46,875 for 21 items. This value is roughly 15% of the FOB cost of these items. Normally 24% is used as the freight estimate when actuals are not available.

<sup>4/</sup> Plans "Apr.-Jun.,'92" is indicated as 'Zero' since no additional procurement is envisaged under this subproject. All the items requested have been procured and declivered to the Centre.

**TABLE 14. GOI INPUTS INTO SOYBEAN PROCESSING AND UTILIZATION THROUGH DECEMBER, 1991.**

(Rs. '000)

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total thru Dec '91<sup>1/</sup></u>	<u>Progress Oct-Dec. '91</u>	<u>Plans Jan-Mar '92</u>
Building facilities	3028	3611	-	-
Office Equip-ment & Supplies	1384	889	-	-
Vehicles	484	168	-	-
Maintenance:				
- Office Equip.	519	90	-	-
- Vehicle	484	22	-	-
- Miscellaneous	-	32	-	-
Staff Salaries	3253	4799	-	-
In-country travel	519	278	-	-
Contingencies	-	174	-	-
<b>TOTAL</b>	<u>9671</u> =====	<u>10063</u> =====	<u>-</u> ===	<u>-</u> ====

<sup>1/</sup> Cumulative expenditure is as of March 31, 1991 as per the last quarterly report received from ICAR when USAID assistance terminated.

**2. Post Harvest Technology of Fruits and Vegetables (PHT-FV).**

Commitment of fresh USAID inputs to this sub-project had ended on March 31, 1991. No training/consultancies were, therefore, scheduled for the January-March, 1992 quarter.

Equipment with an estimated consolidated value of \$1,254,446 has been procured and delivered to the four participating centres. This figure takes into account 31% estimated for freight, insurance, custom clearance, inland transportation and procurement fee.

Progressive expenditure of USAID funds for the PHT project is given in Table 15 and that of GOI in Table 16.

TABLE 15. USAID INPUTS IN POST HARVEST TECHNOLOGY OF FRUITS AND VEGETABLES THROUGH MARCH, 1992 AND PROJECTIONS FOR THE QUARTER APRIL-JUNE, 1992.

(\$ '000 and Rs. '000)

Component	LOP Target		Cum Total <sup>1/</sup> thru Mar '92		Progress Jan-Mar '92		Plans Apr-Jun '92	
	\$	Rs.	\$	Rs.	\$	Rs.	\$	Rs.
U.S. Scientists to India	235	-	242	-	-	-	-	-
Indian Scientists to U.S.	802	-	716	-	-	-	-	-
Workshop, etc. in India	-	17	-	3	-	-	-	-
Workshops, Conferences outside India	-	-	-	-	-	-	-	-
Equip:								
- Imported	1331 <sup>3/</sup>	-	1326 <sup>2/</sup>	-	-	-	-	- <sup>5/</sup>
- Local	-	5830	-	4209	-	-	-	-
Op. Research	-	969	-	638 <sup>4/</sup>	-	-	-	-
Staff Salaries	-	5452	-	4465	-	-	-	-
Mtc. of Res. equipment	-	35	-	4	-	-	-	-
	<u>2368</u>	<u>12303</u>	<u>2284</u>	<u>9319</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
TOTAL (\$)	2368	711	2284	910	-	-	-	-
	=====	=====	=====	=====	=====	=====	=====	=====
Combined (\$)	3079		3194		-		-	

<sup>1/</sup> Consists of actual expenditures under on-going activities, plus reimbursement to ICAR for approved rupee expenditures. Values indicated in "cumulative/Mar.'92" include cost of items delivered into India. 31% has been added to the cost of equipment, providing for freight insurance, clearing, inland transportation and other related costs @ 24% and for procurement fee @ 7% which reflects the additional funding provided for the Sheladia sub-contract.

<sup>2/</sup> The cumulative total for imported equipment reflects an actual freight of \$89,424. This value is roughly 20% of the FOB cost of the items which were transported within this cost. Normally 24% is used to estimate freight when actuals are not available.

<sup>3/</sup> Includes \$35,000 for office equipment.

<sup>4/</sup> USAID funding is only Rs.969,000 (\$56,000) for this line item.

Any expenditure exceeding this funding will not be reimbursed. As per ICAR report for the period ending March, 1991 expenditure shown under this head is Rs.3,061,302. 5/ Plans "Apr.-Jun.'92" for equipment is indicated as 'Zero' since all the items requested under this subproject have been procured and delivered to the institutions.

**TABLE 16. GOI INPUTS INTO POST HARVEST TECHNOLOGY OF FRUITS AND VEGETABLES THROUGH DECEMBER, 1991.**

(Rs. '000)

Component	LOP Target	Cum Total <sup>1/</sup> thru Dec '91	Progress Oct-Dec '91	Plans Jan-Mar '92
Building facilities	9642	4108	-	?
Office Equip-ment & Supplies	1321	998	-	?
Vehicles	1036	827	-	?
Maintenance:				
- Office Equip.	342	113	-	?
- Vehicle	247	78	-	?
Staff Salaries	3425	4183 <sup>1/</sup>	-	?
In-country travel	760	468	-	?
Contingencies	-	-	-	?
<b>TOTAL</b>	<b>16773</b>	<b>10775</b>	<b>-</b>	<b>?</b>
	=====	=====	=====	===

<sup>1/</sup> Expenditure exceeds LOP.

<sup>2/</sup> Cumulative expenditure is as of March, '91 as per the last quarterly report received from ICAR when USAID assistance terminated.

**3. Project Implementation Unit (PIU).**

Progressive expenditure on activities under the PIU are given in Table 17 (USAID inputs) and Table 18 (GOI inputs). There was no dollar expenditure during the January-March, 1992 quarter and no rupee expenditure has been reported.

TABLE 17. USAID INPUTS INTO THE PROJECT IMPLEMENTATION UNIT THROUGH MARCH, 1992 AND PROJECTIONS FOR THE QUARTER APRIL-JUNE, 1992.

(\$ '000 and Rs. '000)

Component	LOP Target		Cum Total <sup>1/</sup> thru Mar.'92		Progress <sup>1/</sup> Jan-Mar'92		Plans Apr-Jun'92	
	\$	Rs.	\$	Rs.	\$	Rs.	\$	Rs.
U.S. Scientists to India	536	-	530 <sup>2/</sup>	-	-	-	6 <sup>3/</sup>	-
Indian Scientists to U.S.	83	-	81	-	-	-	-	-
Equip:Imported	26	-	-	-	-	-	-	-
Local	-	57	-	96	-	-	-	-
Scientist Exch	100	-	96	-	-	-	-	-
	<u>745</u>	<u>57</u>	<u>707</u>	<u>96</u>	<u>-</u>	<u>-</u>	<u>6</u>	<u>-</u>
TOTAL (\$)	745	6	707	10	-	-	6	-
	=====		=====		=====		=====	
Combined (\$)	751		717		-		6	

<sup>1/</sup> Consists of actual expenditures under on-going activities, full estimated costs of recently approved ones, plus reimbursement to ICAR for approved rupee expenditures (including ones where no expenditures have actually been made).

<sup>2/</sup> Includes \$9,000 for Agrometeorology design, \$48,038 for Animal Science design (ETT, IBP, CBAW) and \$30,369 for Forestry Faculty technical Assessment. Also includes \$28,034 for two INSAM consultants.

<sup>3/</sup> \$16,000 for Dr. Buddy Jensen for AGRC (Fisheries) pre-project activity.

**TABLE 18. GOI INPUTS INTO THE PROJECT IMPLEMENTATION UNIT THROUGH DECEMBER, 1991 AND PROJECTIONS FOR THE QUARTER JANUARY-MARCH, 1992. (Rs. '000)**

<b>Component</b>	<b>LOP Target</b>	<b>Cum Total <sup>1/</sup> thru Dec'91</b>	<b>Progress Oct-Dec'91</b>	<b>Plans Jan-Mar'92</b>
Office Equip- ment, Supplies	121	125	-	?
Vehicles	277	-	-	?
Maintenance: - Office Equip.	744	22	-	?
Staff Salaries	4,083	917	-	?
In-country travel	536	15	-	?
Contingencies	-	-	-	?
<b>TOTAL</b>	<b>5,761</b> =====	<b>1079</b> ===	<b>-</b> ===	<b>?</b> ===

<sup>1/</sup> PIU expenditure is as on December 31, 1990 as per the last report received from ICAR.

#### **4. Forestry Faculty Training (FFT).**

This sub-project completed its projected life span on September 30, 1990 when the last batch of trainee had returned to India.

Progressive expenditure of USAID funds on the sub-project is given in Table 19. No counterpart funds from Government of India were provided for this sub-project.

**TABLE 19. USAID INPUTS INTO FORESTRY FACULTY TRAINING THROUGH MARCH, 1992.**

(\$ '000)

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total <sup>1/</sup> thru Mar '92</u>	<u>Progress Jan-Mar '92</u>	<u>Plans Apr-Jun '92</u>
U.S. Scient. to India	-	-	-	-
Indian Scientists to U.S.	3400	3319 <sup>2/</sup>	-	-
<b>TOTAL (\$)</b>	<u>3400</u> ====	<u>3319</u> =====	- ====	- ===

<sup>1/</sup> Consists of actual expenditures under on-going activities.  
<sup>2/</sup> Includes \$167,000 non-ARP funds provided under D.O.41 for 1987-88 group of faculty members. Total unutilized funds remaining in Forestry Faculty subproject is about \$248,000.

**5. Intra-cellular Blood Protista (IBP).**

This sub-project completed its designated life span on March 31 1992. Three Indian scientists; Jyotika Kapur, G.C. Bansal and Debhatta Ray who had gone for five-month training each to the University of Florida during the quarter July-September 1991 completed their training on February 26, 1992 and returned to India.

The one-month consultancy of Dr. M. Ristic planned for December 1991 to help conduct the Triple Vaccine trial that was to be organized by ICAR could not materialize since it was subject to Dr. Ristic providing the vaccine free of cost and ICAR making all necessary arrangements for the trial including suitable animals. So far ICAR has not indicated that any such arrangements are being made. One more consultant, Dr. Len Mattick, who was expected to come for a two-month consultancy on Biological Instrumentation in January 1992 for streamlining the operation of the large complement of biological instrumentation provided under the sub-project, could not come because no such proposal was made by ICAR to USAID.

Equipment worth US\$180,332 was STILL lying in U.S.A. warehouse as on March 31, 1992. Commodity funds amounting to US\$56,287 are still available for procurement but are unlikely to be utilized for lack of time.

Progressive expenditure of USAID funds on Intra-Cellular Blood Protista is given in Table 20 and that of GOI funds in Table 21.

TABLE 20. USAID INPUTS INTO INTRA-CELLULAR BLOOD PROTISTA THROUGH MARCH, 1992 AND PROJECTIONS FOR THE QUARTER APRIL-JUNE, 1992. (\$ '000)

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total <sup>1/</sup> thru Mar '92</u>	<u>Progress <sup>1/</sup> Jan-Mar '92</u>	<u>Plans Apr-Jun '92</u>
U.S. Scient. to India	192	171	-	-
Indian Scient-ists to U.S.	313	266	-	-
Workshop in India	32	-	-	-
Equip.: - Imported	810	752 <sup>3/</sup>	-	- <sup>2/</sup>
Maintenance of Res.Equip.	15 <sup>4/</sup>	-	-	-
<b>TOTAL (\$)</b>	<u>1362</u> ====	<u>1189</u> ====	<u>-</u> ===	<u>-</u> ==

<sup>1/</sup> Consists of actual expenditures under on-going activities. Values indicated in "cumulative/Mar., 1992" include cost of items delivered into India and cost of items in the USA warehouse. 31% has been added to the cost of both categories of equipment, providing for freight, insurance, clearing, inland transportation and other related costs @ 24% and for procurement fee @ 7% which reflects the additional funding provided for the Sheladia sub-contract.

<sup>2/</sup> "Plans for imported equipment for Apr.-Jun.'92" is indicated as 'Zero' since no procurement remains to be made in this quarter. All the items requested under this subproject have been procured. Most of them have been delivered to the institutions and the remaining await despatch from USA.

<sup>3/</sup> The cumulative total for imported equipment reflects an actual freight of \$19,356. This value is roughly 28% of the FOB value of those items shipped within this cost.

<sup>4/</sup> Includes \$10,000 under local currency budget.

**TABLE 21. GOI INPUTS INTO INTRA-CELLULAR BLOOD PROTISTA THROUGH DECEMBER, 1991 AND PROJECTIONS FOR THE QUARTER JANUARY-MARCH, 1992. (Rs. '000)**

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total thru Dec '91</u>	<u>Progress Oct-Dec '91</u>	<u>Plans Jan-Mar '92</u>
Building facilities	1900	1500	-	?
Vehicles	350	265	-	?
Staff salaries	3339	4171	444	?
In-country travel	154	110	8	?
Op. Research	1656	1963 <sup>1/</sup>	63	?
Office Equip. & Supplies	110	76	-	?
Workshops	40	16	-	?
Res. Equip.	1986	1227	-	-
<b>TOTAL</b>	<u>9535</u>	<u>9328</u>	<u>515</u>	<u>?</u>
	=====	====	===	===

<sup>1/</sup> Exceeds LOP funding.

#### **6. Embryo Transfer Technology (ETT).**

Commitment of fresh USAID inputs to the ETT sub-project terminated on March 31, 1992.

According to the new work plan, six Indian scientists totalling 18 person-months were scheduled to leave for training in U.S.A. during the remaining life of this subproject. Drs. S. Singla and D.K. Nandy went for 3 months each on January 8, 1992. The other four scientists viz. Dr. O.P. Dhanda, Dr. S.V. Ramchandriah, Dr. K.V. Rao and Mr. S.K. Jindal left for U.S.A. on March 7, 1992 for a 7-week training program in Embryo Transfer Technology.

One consultant, Dr. R. Wright was scheduled to come for one month during the October-December 1991 quarter. The consultancy of Dr. Wright stood cleared by DARE/DEA/USAID but the recipient institution NDRI, Karnal was slow in coming up with a mutually acceptable time and Terms of Reference for this consultancy with the result that Dr. Wright regretted his inability to come due to other commitments. No further consultancies are planned during the remaining life of this sub-project.

Equipment totalling an estimated consolidated value of \$339,000 has been procured. This figure takes into account 31% estimated for freight, insurance, custom clearance, inland transportation and procurement fee.

Most of the equipment has been delivered to the four participating centres. Equipment valued at approximately \$8,308 was lying in the warehouse (U.S.A.) and is expected to be shipped to India during the April-June, 1992. quarter.

Procurement of a micromanipulator for NDRI, Karnal that was being processed to be delivered to the centre in the January-March, 1992 quarter has been dropped due to time constraint.

About \$276,982 of commodity funds remain unutilized and reflects the budget for the IVRI centre who opted not to receive any equipment under this sub-project.

Progressive expenditure of USAID funds for the ETT sub-project is given in Table 22 and that of GOI funds in Table 23.

**TABLE 22. USAID INPUTS IN EMBRYO TRANSFER TECHNOLOGY THROUGH MARCH, 1992 AND PROJECTIONS FOR THE QUARTER APRIL-JUNE, 1992.**  
(\$ '000)

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total <sup>1/</sup> thru Mar '92</u>	<u>Progress <sup>1/</sup> Jan-Mar '92</u>	<u>Plans Apr-Jun '92</u>
U.S. Scientists to India	207	108	-	-
Indian Scientists to U.S.	316	171	105	-
Workshop, etc. in India	32	-	-	-
Workshops, Conferences outside India	-	-	-	-
Equip: Imported	638	350	8	- <sup>3/</sup>
Op. Research	-	-	-	-
Staff Salaries	-	-	-	-
Mtc. of Res. equipment	15 <sup>2/</sup>	-	-	-
<b>TOTAL (\$)</b>	<b>1208</b>	<b>629</b>	<b>113</b>	<b>-</b>
	====	===	===	===

<sup>1/</sup> Consists of actual expenditures under on-going activities, full estimated costs of recently approved ones (where no

expenditures have been reported), plus reimbursement to ICAR for approved rupee expenditures. Values indicated in "cumulative/Mar, 1992" include cost of items delivered into India and cost of items in the USA warehouse. 31% has been added to the cost of both categories of equipment, providing for freight, insurance, clearing, inland transportation and other related costs @ 24% and for procurement fee @ 7% which reflects the additional funding provided for the Sheladia sub-contract.

2/ Includes \$10,000 under local currency budget.

3/ Plans "Apr-Jun'92" for equipment is indicated as 'Zero' since all the items requested under this subproject have been procured where some of them have been delivered to the institutions and the remaining await despatch from U.S.A.

**TABLE 23. GOI INPUTS IN EMBRYO TRANSFER TECHNOLOGY THROUGH DECEMBER, 1992 AND PROJECTIONS FOR THE QUARTER JANUARY-MARCH, 1992. (Rs. '000)**

Component	LOP Target	Cum Total thru Sep'91	Progress Jul-Sep'91	Plans Oct-Dec'91
Staff Salaries	5310	4034	210	210
Vehicle	513	930 <sup>1/</sup>	50	50
In-country travel	219	158	10	10
Workshops, etc.	252	80	-	-
Res. Equip.	523	600 <sup>1/</sup>	-	-
Maintenance:				
- Res. Equip.	-	258	20	20
- Office Equip.	-	-	-	-
Op. Research	2870	2220	120	?
Contingencies	503	1259 <sup>1/</sup>	-	80
<b>TOTAL</b>	<b>10190</b> =====	<b>9539</b> =====	<b>410</b> =====	<b>370</b> ===

<sup>1/</sup> In these line items, expenditure exceeds LOP figures.

**7. Conversion of Biodegradable Animal Wastes (CBAW).**

Commitment of fresh USAID inputs to this sub-project terminated on March 31, 1992.

One consultant, Dr. Fontenot, came for a two-week wrap-up consultancy during March 10-23, 1992.

Progressive expenditure of USAID funds for the CBAW sub-project is given in Table 24 and that of GOI funds in Table 25.

**TABLE 24. USAID INPUTS INTO CONVERSION OF BIODEGRADABLE ANIMAL WASTES THROUGH MARCH, 1992 AND PROJECTION FOR THE QUARTER APRIL-JUNE, 1992.**

(\$ '000)

Component	LOP Target	Cum Total <sup>1/</sup> thru Mar'92	Progress <sup>1/</sup> Jan-Mar'92	Plans Apr-Jun'92
U.S. Scient. <sup>2/</sup> to India	180	206	16	-
Indian Scientists to U.S.	415	449	-	-
Workshop, Conferences outside India	35	-	-	-
Equip:Imported	484	485	-	- <sup>4/</sup>
Op. Research	-	-	-	-
Staff Salaries	-	-	-	-
Mtc. of Res. equipment	15 <sup>3/</sup>	-	-	-
<b>TOTAL (\$)</b>	<b>1129</b> ====	<b>1140</b> ====	<b>16</b> ====	<b>-</b> ===

<sup>1/</sup> Consists of actual expenditures under on-going activities, full estimated costs of recently approved ones (where no expenditures have been reported), plus reimbursement to ICAR for approved rupee expenditures. Values indicated in "cumulative/Mar., 1992" include cost of items delivered into India and cost of items in the warehouse. 31% has been added to the cost of both categories of equipment, providing for freight, insurance, clearing, inland transportation and other related costs @ 24% and for procurement fee @ 7% which

reflects the additional funding provided for the Sheladia subcontract.

2/  
3/  
4/

Includes consultants to workshops in India.

Includes \$10,000 under local currency budget.

Plans for imported equipment for "Apr.-Jun.'92" is indicated as 'Zero' since all the items requested under this subproject have been procured and delivered to the institutions.

TABLE 25. GOI INPUTS IN CBAW THROUGH DECEMBER, 1991 AND PROJECTIONS FOR THE QUARTER JANUARY-MARCH, 1992.

(Rs. '000)

Component	LOP Target	Cum Total thru Sep'91 <sup>2/</sup>	Progress Oct-Dec'91	Plans Jan-Mar'92
Building facilities	-	-	-	-
Vehicles	500	322	-	-
Maintenance				
-Research Equip.	50	24	-	-
-Office Equip.	35	29	-	-
-Vehicles	50	34	-	-
Staff salaries	6967	5147	-	-
In-country travel	505	283	-	-
Op. Research	300	335 <sup>1/</sup>	-	-
Office Equip. and Supplies	2225	1780	-	-
Workshops	250	45	-	-
Res. Equip.	1080	1106	-	-
<b>TOTAL</b>	<b>11962</b>	<b>9105</b>	<b>-</b>	<b>-</b>
	=====	=====	=====	=====

<sup>1/</sup> Expenditure exceeds LOP.

<sup>2/</sup> Cumulative expenditure is as of September, 1991 as per the last quarterly report received from ICAR.

## 8. Plant Genetic Resource (PGR)

Under this sub-project no activity has been undertaken within the framework of the MSS after March, 1990. It has since been covered under a PASA between USAID and USDA.

Table 26 reports the cumulative financial data on costs covered by USAID for this sub-project during the period it was under the purview of the MSS.

TABLE 26. USAID INPUTS INTO PLANT GENETIC RESOURCES THROUGH MARCH, 1992.

(\$ '000)

Component	LOP Target	Cum Total thru Mar'92	Progress during Jan-Mar'92 <sup>1/</sup>	Plans Apr-Jun'92 <sup>1/</sup>
U.S. Scient. to India	119	74	-	-
Indian Scientists to U.S.	81	119	-	-
<b>TOTAL</b>	<b>200</b>	<b>193</b>	<b>-</b>	<b>-</b>
	=====	=====	=====	=====

<sup>1/</sup> PGR funds are currently expended through a PASA between USAID and USDA.

## 9. Agroforestry research (Agrofor).

This sub-project will complete its life span on June 30, 1992 when the ARP itself comes to a close.

No Indian scientists were deputed for training in the U.S.A. during January-March, 1992 quarter but six scientists who had been sent earlier (September 1990/January 1991) for 18-month doctoral course work program continued their training during the quarter.

No new trainees are planned to go to the U.S.A. during the remaining life of the sub-project.

Two U.S. consultants viz. Drs. J.D. Hodges and L.E. Nelson arrived on April 17 to conduct a two-week training workshop on Agroforestry Ecosystems Studies at Madurai Campus of the Tamil Nadu Agricultural

University. This will be the eighth and last of such workshops organized under this sub-project.

The projected procurement of 17 computer systems from within India could not be completed because of time constraints.

However, the DGTD granted a NMIC in respect of 19 items of agroforestry equipment enabling Winrock to ship these equipments to India after a more than one year storage in their U.S. warehouse. This equipment is now being delivered to research centres in India.

Additional equipment worth \$121493 was lying in the warehouse in USA and is expected to be delivered to sites during the April-June, 1992 quarter.

Progressive expenditure of USAID inputs to Agroforestry sub-project is given in Table 27.

TABLE 27. USAID INPUTS INTO AGROFORESTRY RESEARCH THROUGH MARCH, 1992 AND PROJECTIONS FOR THE QUARTER APRIL-JUNE, 1992.

(\$ '000)

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total <sup>1/</sup> thru Mar '92</u>	<u>Progress Jan-Mar '92</u>	<u>Plans Apr-Jun '92</u>
U.S. Scient. to India	205	240	-	32
Indian Scientists to U.S.	984	911 <sup>2/</sup>	-	-
Equipment	927	618	69	- <sup>3/</sup>
Workshop	60	-	-	-
Equip. Mtc.	-	-	-	-
<b>TOTAL</b>	<b>2176</b>	<b>1,769</b>	<b>69</b>	<b>32</b>
	=====	=====	===	===

<sup>1/</sup> Consists of actual expenditures under on-going activities and full estimated costs of recently approved ones (where no expenditures have been reported). Values indicated in "cumulative/Mar., 1992" include cost of items delivered into India and cost of items in the USA warehouse. 31% has been added to the cost of both categories of equipment, providing for freight, insurance, clearing, inland transportation and other related costs @ 24% and for procurement fee @ 7% which reflects the additional funding provided for the Sheladia sub-contract. Under this subproject \$77,000 has been included in the cumulative figure upto June, 1992. This amount is the

cost of computers procured locally by Winrock/Delhi. There was no procurement fee. Also, no transportation cost has been added since this value is included in the basic cost.

2/

Includes in-country training for 41 participants.

3/

Plans "Apr-Jun'92" for equipment is indicated as 'Zero' since all the items requested under this subproject have been procured where most of them have been delivered to the institutions and the remaining await despatch from U.S.A.

#### 10. Agrometeorology (Agromet).

This sub-project also will complete its designated life span on June 30, 1992 concurrently with that of the ARP.

Two Indian scientists, Dr. O.P. Bishnoi and Mr. A. Wadood who were expected to leave for U.S.A. for 5-month training in crop-weather modelling and response farming but could not do so due to delays in the ICAR/DARE/DEA clearances finally left for U.S.A. on April 17 for a reduced period of training of two months only.

A 2-week Computer Awareness Training program for twenty Indian agrometeorologists started at New Delhi on April 13, 1992.

Two U.S. consultants viz. Drs. K.G. Hubbard and S.J. Meyer are scheduled to arrive on May 8 for conducting a three-week training workshop on Crop Advisory Services at CRIDA, Hyderabad.

Equipment worth \$803,756 has been delivered in India; equipment worth \$66,712 is lying in U.S. warehouse and equipment worth \$15,307 has recently been contracted. All the equipment will be delivered in India by June 30, 1992.

Progressive expenditure of USAID funds and GOI funds on Agrometeorology is given in Table 28 and Table 29 respectively.

**TABLE 28. USAID INPUTS INTO AGROMETEOROLOGY THROUGH MARCH, 1992 AND PROJECTION FOR THE QUARTER APRIL-JUNE, 1992.**

(\$ '000)

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total <sup>1/</sup> thru Mar '92</u>	<u>Progress Jan-Mar '92</u>	<u>Plans Apr-Jun '92</u>
U.S. Scient. to India	260	178	26	36
Indian Scientists to U.S.	408	307	15	36
Workshop	40	-	-	-
Equipment <sup>2/</sup>	990 <sup>1/</sup>	920	70	-
Equip. Mtc.	-	-	-	-
<b>TOTAL</b>	<u>1,698</u> =====	<u>1,505</u> ====	<u>111</u> ===	<u>52</u> ===

<sup>1/</sup> Consists of actual expenditures under on-going activities, full estimated costs of recently approved ones (where no expenditure has been reported). Values indicated in "cumulative/March, 1992" include cost of items delivered into India and cost of items in the warehouse. 31% has been added to the cost of both categories of equipment, providing for freight, insurance, clearing, inland transportation and other related costs @ 24% and for procurement fee @ 7% which reflects the additional funding provided for the Sheladia sub-contract. Under this subproject \$198,000 has been included in the cumulative figure upto June, 1992. This amount is the cost of computers procured locally by Winrock/Delhi. There was no procurement fee. Also, no transportation cost has been added since this value is included in the basic cost.

<sup>2/</sup> Plans "Apr-Jun '92" for equipment is indicated as 'Zero' since all the items requested under this subproject have been procured where some of them have been delivered to the institutions and the remaining await despatch from U.S.A.

TABLE 29. GOI INPUTS INTO AGROMETEOROLOGY THROUGH DECEMBER, 1991 AND PROJECTION FOR THE QUARTER JANUARY-MARCH, 1992. (Rs. '000)

Component	LOP Target	Cum Total thru Dec'91	Progress Oct-Dec'91	Plans Jan-Mar'92
Office equip., Supplies	552	548	-	-
Staff salaries	8097	8601	490	520
In-country travel	347	361	10	20
Contingencies	1238	1137	111	100
<b>TOTAL</b>	<b>10234</b>	<b>10647</b>	<b>610</b>	<b>640</b>
	=====	====	===	====

**PRE-PROJECTS:**

**11. Integrated Pest Management (IPM)**

Work on this pre-project had gotten off to a good start during the July-September 1990 quarter when three Indian scientists, viz., Drs. S. Nagarajan, A.K. Raheja and S.P. Singh went to the U.S.A. as a management team to initiate the project design process.

Subsequently, four more Indian scientists, viz., Drs. N. Singh, O.P. Sharma, C.R. Ballal and N. Krishnananda also went to the U.S.A. for a three-month training program in August 1990.

Following this, a three-member team of three U.S. scientists, viz., Drs. A.L. Steinhauer, R.E. Ford and C.R. Edward came to India during April 12-May 03, 1991 to complete the Design of the project document.

Two more consultants were expected to come for one month each during the January-March, 1992 quarter to advise on further strengthening the research and development programme of ICAR in the field of integrated pest management. This consultancy has not materialized since ICAR has not processed such a proposal for submission to USAID.

Three Indian scientists viz. Drs. Satyavir, Sundermurthy, and S.C. Tiwari left for U.S.A. on April 22, 1992 for a three-week training program.

The tentatively projected training of five more Indian scientists for a 7-week training program could be arranged for a reduced period of four weeks because of time constraint. Five scientists, viz. Drs. Harvir Singh, S.K. Duttamajumdar, B.S. Chhiller, S.K. Jalali and D.P. Rajendran left for USA on May 14, 1992.

The consultancy visit of two U.S. consultants for one month each could not materialize for want of a requisite proposal from ICAR/DARE.

Equipment worth \$35,550 is lying in warehouse in USA and is expected to be delivered to site in India by last week of June, 1992.

Financial data on USAID inputs in given in Table 30.

TABLE 30. USAID INPUTS INTO INTEGRATED PEST MANAGEMENT THROUGH MARCH, 1992 AND PROJECTIONS FOR THE QUARTER APRIL-JUNE, 1992. (\$'000)

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total thru Mar '92</u>	<u>Progress Jan-Mar '92</u>	<u>Plans Apr-Jun '92</u>
U.S. Scient. <sup>1/</sup> to India	40	-	-	-
Indian Scient- ists to U.S.	80	90 <sup>1/</sup>	-	20
Equipment	30	37	37	- <sup>2/</sup>
<b>TOTAL</b>	<u>150</u> =====	<u>127</u> ====	<u>37</u> ===	<u>20</u> ===

<sup>1/</sup> Expenditure exceeds LOP. NRM needs to revise the LOP figures.  
<sup>2/</sup> Plans "Apr-Jun'92" for equipment is indicated as 'Zero' since all the items requested under this subproject have been procured and await despatch from U.S.A.

## 12. Animal Genetic Resource Conservation (AGRC)

Design process under this pre-project was initiated in January, 1991 when a three-person management team of Indian scientists consisting of Drs. D.S. Balain, S.C. Chopra and C.L. Arora went to the U.S.A. for a three weeks study tour during January 2-22, 1991. A fourth member, Dr. P. Das also undertook a similar tour later during March 4-20, 1991 in respect of Fish Genetic Resources.

A team of two U.S. consultants viz., Dr. John Pino and Dr. Eric Bradford came on February 16, 1992 for a four-week consultancy to finalize the project design paper in respect of conservation of land animal resources and one consultant viz., Dr. Buddy Jensen was expected to come during April 1992 to finalize the project paper on Fish Genetic Resource Conservation. Dr. Buddy Jensen will be funded under the budget of the PIU.

Three Indian scientists, Drs. B. Prakash, Vijay Shankar and R.K. Sethi left on April 9, 1992 for a two-month training program in U.S.A.

Dr. Buddy L. Jensen arrived on April 18 for a three-week consultancy on Fish Genetic Resource Conservation.

Equipment worth \$38,884 has been procured and is lying in the warehouse in U.S.A. It is expected to be delivered to sites by the last week of June, 1992.

Financial data on U.S. inputs are given in Table 31.

**TABLE 31. USAID INPUTS INTO ANIMAL GENETIC RESOURCE CONSERVATION THROUGH MARCH, 1992 AND PROJECTIONS FOR THE QUARTER APRIL-JUNE, 1992.**

(\$'000)

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total thru Mar '92</u>	<u>Progress Jan-Mar '92</u>	<u>Plans Apr-Jun '92</u>
U.S. Scient. to India	70	32 <sup>1/</sup>	-	-
Indian Scientists to U.S.	25	-	-	43
Equipment <sup>1/</sup>	55	41	41	-
<b>TOTAL</b>	<u>150</u>	<u>73</u>	<u>41</u>	<u>43</u>
	=====	====	===	===

<sup>1/</sup> Expenditure incurred on Indian Mangment team to U.S. has been shown under Technical Assistance as per the PIL No. 41.

<sup>2/</sup> Plans "Apr-Jun'92" for equipment is indicated as 'Zero' since all the items requested under this subproject have been procured and await despatch from U.S.A.

### 13. Tissue Culture in Horticultural Crops (TCHC)

The design process under this pre-project was started in January-March 1991, when a three-person management team of Indian scientists went to the U.S.A. for a three week study tour during February 21-March 12, 1991.

During the October-December, 1991 quarter a team of two U.S. scientists viz., Dr. Richard E. Litz and Dr. A. Dandekar came to India on December 01, 1991 for three weeks each to finalize the project design paper.

Four Indian scientists, viz. Drs. (Mrs) Leela Sahijram, H.C. Sharma, S. Shivashankar and S.V. Bhardwaj left on March 12 for a three-month training in U.S.A. .

Equipment worth \$30,826 have been procured and are expected to be delivered on site around last week of June, 1992.

Financial data on USAID inputs is given in Table 32.

TABLE 32. USAID INPUTS INTO TISSUE CULTURE IN HORTICULTURE CROPS THROUGH MARCH, 1992 AND PROJECTIONS FOR THE QUARTER APRIL-JUNE, 1992.

(\$'000)

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total thru Mar'92</u>	<u>Progress Jan-Mar'92</u>	<u>Plans Apr-Jun'92</u>
U.S. Scient. to India	40	25 <sup>1/</sup>	-	-
Indian Scientists to U.S.	90	82	82	30
Equipment <sup>1/</sup>	20	33	33	- <sup>2/</sup>
<b>TOTAL</b>	<u>150</u> =====	<u>140</u> ====	<u>115</u> ===	<u>30</u> ===

<sup>1/</sup> Expenditure incurred on Indian Mangment team to U.S. has been shown under Technical Assistance as per the PIL No. 41.

<sup>2/</sup> Plans "Apr-Jun'92" for equipment is indicated as 'Zero' since all the items requested under this subproject have been procured where some of them have been delivered to the institutions and the remaining await despatch from U.S.A.

#### 14. Protected Cultivation and Green Houses (PCGH)

The project design paper in respect of this pre-project had been completed by Dr. David Mears as a staff member of USAID/India. He came to India for a two-week consultancy during November 23-December 8, 1990.

Four Indian scientists, viz. Drs. N.K. Dadlani, P. Chandra, B.S. Prabhakar, K.P. Singh went to U.S.A. on August 22, 1991 for a three-month training in the design and operation of Green Houses at Ohio State University and Rutgers University.

After the return of the four Indian scientists from training in U.S.A. and delivery of the greenhouses to be procured for this pre-project, Dr. David Mears was expected to come for a two-weeks' consultancy during January-March, 1992 quarter. This is, however, unlikely to materialize due to delay in the delivery of the green houses.

As stated in the last quarterly report (No.29), two greenhouses and two microloggers were to be procured for this pre-project. These have been ordered and are expected to be delivered in site sometimes during June, 1992. This will, however, not leave enough time for the proposed two-week consultancy of Dr. David Mears.

A proposal for a 3-week study tour by a five-member team of senior Indian scientists, viz. Drs. K.L. Chadha, H.S. Gill, J.S. Arora, O.D. Wanjari and B. Singh to selected U.S. institutions has been approved and the visit is scheduled to commence from May 16, 1992.

Financial data on USAID inputs is given in Table 33.

**TABLE 33. USAID INPUTS INTO PROTECTED CULTIVATION AND GREEN HOUSES THROUGH MARCH, 1992 AND PROJECTIONS FOR THE QUARTER APRIL-JUNE, 1992. (\$'000)**

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total thru Mar '92</u>	<u>Progress Jan-Mar '92</u>	<u>Plans Apr-Jun '92</u>
U.S. Scient. to India	35	11	-	-
Indian Scientists to U.S.	90	83	-	-
Equipment	25	34	34	- <sup>1/</sup>
<b>TOTAL</b>	<u>150</u>	<u>128</u>	<u>34</u>	<u>-</u>
	=====	=====	===	===

<sup>1/</sup> Plans "Apr-Jun'92" for equipment is indicated as 'Zero' since all the items requested under this subproject have been procured and await despatch from U.S.A.

**15. On-Farm Water Management (OFWM)**

Plans for the January-March, 1992 quarter called for training of four Indian scientists for three months in U.S.A.; visit of two U.S. consultants for one month each, and procurement of equipment worth U.S.\$20,000.

Four Indian scientists, viz. Drs. B.K. James, Ashwani Kumar, R.B. Singhandhupe and A.K. Singh were scheduled to leave for training on April 9, 1992. However, because of time constraint, their training period has been reduced to two months and they would return on June 12, 1992.

A three-member team consisting of the following: Drs. B.R. Sharma, R.K. Rajput and S.R. Singh was scheduled to leave on a 3-week study tour on April 12, 1992.

Plans developed earlier for the procurement of one computer system from within India and are neutron moisture meter from U.S.A. have had to be dropped because of unmanagable time constraints.

Financial data on USAID inputs is given in Table 34.

**TABLE 34. USAID INPUTS INTO ON-FARM WATER MANAGEMENT THROUGH MARCH, 1992 AND PROJECTIONS FOR THE QUARTER APRIL-JUNE, 1992.**  
(\$'000)

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total thru Mar '92</u>	<u>Progress Jan-Mar '92</u>	<u>Plans Apr-Jun '92</u>
U.S. Scient. to India	50	33	33	-
Indian Scientists to U.S.	80	-	-	101
Equipment	20	-	-	20
<b>TOTAL</b>	<u>150</u> =====	<u>33</u> =====	<u>33</u> =====	<u>121</u> =====

**16. Farm Machinery**

Plans for the available life of the pre-project were finally developed. These called for:

1. Training of six Indian scientists in Farm Equipment Manufacturing Technology for two months each.
2. Visit of one U.S. consultant for four weeks to India as a follow-up to the above training of 6 Indian scientists.
3. Study tour visit of a three-member team of Indian scientists for three weeks to selected U.S. institutions.

Implementation schedules for the three-week study tour is, however, yet to be developed since the proposal has not yet been sent by DARE to DEA for clearance. The six Indian scientists are scheduled to leave on April 18, 1992 for two-month training and Mr. Fred Nichols, short-term consultant, is scheduled to arrive for 4 weeks consultancy on May 4, 1992.

No funds were provided for equipment procurement under this pre-project.

Financial data on USAID inputs is given in Table 35.

**TABLE 35. USAID INPUTS INTO FARM MACHINERY THROUGH MARCH, 1992 AND PROJECTIONS FOR THE QUARTER APRIL-JUNE, 1992.**

(\$'000)

<u>Component</u>	<u>LOP Target</u>	<u>Cum Total thru Mar '92</u>	<u>Progress Jan-Mar '92</u>	<u>Plans Apr-Jun '92</u>
U.S. Scient. to India	48	-	-	16
Indian Scientists to U.S.	102	-	-	99
Equipment	-	-	-	-
<b>TOTAL</b>	<b>150</b>	<b>-</b>	<b>-</b>	<b>115</b>
	====	===	===	===