

**AFGHANISTAN AGRICULTURE & RURAL  
REHABILITATION PROJECT**

USAID 306-0204

**Quarterly Report**

for the period

January through March 1990



**Volunteers in Technical Assistance (VITA)**  
Arlington, Virginia

**Eng. M. M. A. Sediq, Chief of Party**  
PESHAWAR, PAKISTAN

April 1990

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the name of Allah,  
the merciful and compassionate

I send greetings and respectfully submit  
this report on the activities of  
VITA/AARRP  
during the period January through March 1990

M. M. A. Sediq  
Chief of Party  
April 1990

# Afghanistan



**VITA Agriculture Rehabilitation Schemes (ARSs) in Afghanistan  
As of 31 March 1990**

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## SUMMARY

The first quarter of 1990 (second quarter FY90) marked the final months of the VITA contract for the Afghan Agriculture and Rural Rehabilitation Project (AARRP), which had its beginnings in June 1987. Under this contract, VITA has provided assistance to Afghan farmers through the sixteen area rehabilitations schemes (ARSs) in twelve provinces of Afghanistan. This assistance has been in commodities such as water pumps and threshers, provided through regular commercial channels by way of a subsidy scheme, and seed and fertilizer distributed through local shuras on a subsidised price basis. The rental of tractors and threshers was possible in some ARS locations, helping the farmers who are desparately short of farm power and manpower.

In addition to the help given directly to farmers, the ARSs have been the focus of VITA efforts to repair and reconstruct irrigation systems, build and repair farm-to-market roads, and rebuild bridges destroyed by military action. This rehabilitation of the rural infrastructure benefits all the farmers and their families in the areas the ARSs can reach. It is essential to the restoration of agricultural productivity which will make the eventual return of refugees to a normal existence possible.

With the end of the contract and the beginning of a new cooperative agreement between AID/REP and VITA, signed on 15 March 1990, a new phase of operations begins. The agricultural components of the project have been shifted to another contractor, Development Alternatives, Inc. (DAI), and VITA will concentrate its efforts on the rural infrastructure rehabilitation activities. While the cleaning and repairing of karezes and juis will continue as an important contribution to restoring irrigation systems, more complex projects will also be undertaken that will have greater impact on wider areas. More bridge construction and road rehabilitation will help the farmers move their produce to markets and assist in the movement of refugees as they return to their homes.

While the field operations continued during this quarter, though at reduced levels in some areas due to winter weather conditions, considerable time was devoted to the planning of the new program and the preparation of the new cooperative agreement documents. Arrangements were made for the transfer of a number of the agriculturists to DAI and for the transfer of agricultural equipment from the VITA inventory rolls to DAI

At the end of the three years of operations under the AARRP, it is possible to look back on significant accomplishments. From very small beginnings in a wartime environment with great problems of security, logistics, and lack of trained personnel, the project has developed the technical capabilities and the organisation that have enabled it to make a real impact on the problems of rehabilitation of the agricultural sector in Afghanistan. A short list of some of the accomplishments of the VITA/AARRP is given below.

## AGRICULTURE

1. Seed Multiplication - 190 tons of wheat seed, 628 tons of fertilizer sent to 1,200 farmers with 6,410 jeribs under the program.
2. Fruit trees - 140,377 apple trees and 900 other fruit trees have been sent into Afghanistan.
3. The Dara and Swat nurseries have provided 14,877 budded apple trees and 9,000 other budded trees. The nurseries now have 12,000 trees. A bubble irrigation system was designed and installed in the Dara nursery and demonstrated its effectiveness in orchard irrigation.
4. A total of 354 wheat threshers have gone into Afghanistan through commercial traders for sale subsidized by VITA or through direct import by VITA for demonstration, rental, and sale.
5. Other farm equipment sent into Afghanistan through VITA efforts include 1,749 water pumps, 9 reapers, 180 rice huskers, and 450 bullocks.
6. Cuttings of poplar and mulberry trees have been planted in the Dara and Swat nurseries and have been sent into Afghanistan to begin reforestation programs in 145 nurseries — 647,000 poplar and 156,000 mulberry cuttings in all.

## RURAL REHABILITATION

1. Requests for assistance received in the past three years:

Irrigation - 32,358  
Roads - 2548  
Bridges - 6,166

2. Projects now under construction:

Irrigation - 1,298  
Roads - 7  
Bridges - 5

3. Projects completed to date:

Irrigation - 1,124  
Roads - 8  
Bridges - 7

Irrigation projects completed or now under construction will serve more than 960,000 jeribs of land and benefit over 145,000 families. Roads completed or under way total 225 kilometers in length.

## ORGANIZATION

1. Sixteen Area Rehabilitation Schemes (ARSs) have been established in 12 provinces of Afghanistan to implement agricultural and rural rehabilitation activities. These "field offices", having from eight to 16 staff members, work with local shuras (governing councils) and mujahidin commandants to plan and implement projects in the nearby areas.
2. Thirteen in-service training courses for ARS staff have been conducted in Peshawar, the latest (December 1989 to March 1990) had over 75 technicians, agriculturists, and tractor operators participating.
3. The VITA staff in Peshawar has developed into a cohesive and effective unit that can plan, implement, and administer complex projects across the border in Afghanistan.

# COMPONENT 1: AGRICULTURAL SERVICES

## A. HORTICULTURE

### A-1 Completed Project Activities

#### a. Importance of fruit

Fruit is very important and plays a great role in the Afghanistan economy. Before 1978 a considerable amount of fruit, both fresh and dried, was exported to the world markets. The war has inflicted considerable damage to the fruit crops. In most places the orchards are run down to the point where they are not economical to maintain, and replacement planting must be done.

#### b. Work in Nurseries in Pakistan (Swat and Dara)

Of the 13,077 budded apple trees which have been dug out from the Dara and Swat nurseries, 1,786 trees have already been sent to Kandahar and Nagarhar provinces. Using these trees, two orchards were established in Nangarhar and three in Kandahar. The orchards vary from 275 to 565 trees.

The rest of the trees, which have been allocated for colder regions such as Logar, Ghazni, Parwan and Wardak provinces, are still in cold storage in Peshawar. These trees will be sent inside as soon as the weather is permissible in April. Using these trees, the farmers will establish 10 orchards in Logar, 10 in Ghazni, 9 in Wardak, 2 in Parwan and 1 in Kunar. These orchards will have from 213 to 624 apple trees each.

In addition, VITA has provided the farmers of Logar, Wardak, Ghazni, Kandahar, Parwan and Kunar with Japanese pear trees. In each of these provinces, one pear orchard has been established for demonstration purposes. Each orchard has 200 pear trees which were grown and budded in the Dara nursery.

Thirty trainees (agriculturists) from various ARSs participated in a VITA training course from Dec. 1989 through Feb. 1990. They were taken several times to both nurseries to observe and take part in the activities of soil preparation, sowing fruit tree seeds, pruning, and digging out and packing of budded trees for transport inside Afghanistan. They also observed the installation and operation of the bubble irrigation system in Dara.

The following seeds and cuttings were planted in the Dara nursery during the reporting period:

- |  |                 |
|--|-----------------|
| 1. Apricot seed  | 25 kg.          |
| 2. Peach seed  | 35 kg.          |
| 3. Russian olive seed                                  | 5 kg.           |
| 4. Poplar cuttings from the Forest Institute, Peshawar | 20,000 cuttings |

All the trees which had been planted in the Dara nursery for test, demonstration and training purposes, were pruned, and all the pear and apples seedlings which were budded in October 1989 were cut back to bud.

The following seeds and cuttings were planted in the Swat nursery.

- |   |                |
|---|----------------|
| 1. Pear seed                                      | 15 kg.         |
| 2. Apple seed                                     | 15 kg.         |
| 3. Apple root stock, imported by FAO from England | 7,000 roots    |
| 4. Poplar cuttings from Turkey                    | 6,000 cuttings |

Two acres of land were added to the Swat nursery to accommodate the expansion of horticulture activities.

### c. Import of trees from Turkey

VITA's demonstration orchards created a great demand for apple trees among fruit growers in Ghazni, Logar and Wardak provinces. After long discussions, VITA was able to complete the necessary requirements for ordering 150,000 apple trees from Turkey. VITA was assured by RONCO and USAID that the trees would be supplied by Horizon Co., a USA supplier from Turkey. Horizon Co. was not able to supply the full 150,000 trees, but shipped 93,000. Since VITA had signed contracts which committed them to provide 150,000 trees to 524 fruit growers, we searched for and found more trees in Quetta. More than 32,000 trees were purchased and transported to Peshawar. Now 125,500 apple trees are ready for shipment into Afghanistan.

## A-2 Verification Status

Reports on the development of demonstration plots at various ARSs have come from the agriculturists attending the training courses during the winter months. The activities. The work in the Dara and Swat nurseries has been under the direct

control of Dr. Wakil and the nurseries have been visited by a number of headquarters staff members as well as the participants in the winter training courses.

### **A-3 Constraints Identified & Solutions Proposed**

The problems associated with shipping large numbers of seedlings and small trees into Afghanistan are great. The timing has to take into consideration the weather conditions in various localities as well as the estimated delivery times of the trees from Turkey to Pakistan. Transport is difficult to arrange in advance. And it is not easy to keep the staffs of the ARSs informed as to arrival times so that they can be prepared. A number of the trainees at the winter courses have been kept in Peshawar so as to be on hand to assist in taking the trees to their ARSs, which should help greatly.

### **A-4 Work Plan for Next Quarter**

As all of the horticulture activities will be transferred to Development Alternatives Inc. (DAI) at the end of the present VITA contract on 31 March, VITA will have no further responsibility for planning or implementation in this area.

## B. FERTILIZER AND SEED

### B-1 Completed Project Activities

#### a. Fertilizer and Seed Program

A total of 56 MT of Pirsabak-85 improved wheat seed, 100 MT of Urea and 50 MT of DAP for Shamalon and Derweshan districts of Helmand province had been sent in October 1989 were distributed among the farmers for the seed multiplication program. The seed and fertilizer are given to the individual farmer on contract basis. A total of 379 farmers in 27 villages of Shamalan and Darweshan districts of Helmand province received the seed and fertilizer. About 2,000 jeribs of land is planted to this high yielding wheat variety and it is expected to produce about 1.260 MT of seed this harvest season. Four wheat demonstration plots, two each in Shamalan and Darweshan have been established to show and convince the farmers of the superiority of the new improved variety of wheat seed. These demonstration plots are one jerib each.

VITA under various Afghanistan Agriculture Development Programs has sent seeds and fertilizer to ARSs inside Afghanistan from 1988 to 1989. The first shipment of wheat seed and fertilizer to Panjwai/Kandahar was made in 1988. See Table 1 below.

**TABLE 1**

#### **Seed Multiplication in Panjwai/Kandahar in 1988**

VARIETY	SEED AMOUNT	FERTILIZER AMOUNT UREA	DAP	AREA IN JRB UNDER PROG.	# OF FARMERS
Pir-85	2.5 Ton	4.25	2.125	89	357
Pak-81	2.5 Ton	4.25	2.125	89	357

In 1989 VITA provided 185 MT of three high yielding varieties of improved wheat seed with 465.5 MT of fertilizer to 12 ARSs in seven provinces. See table two.

**TABLE 2**

**Wheat Seed Multiplication - 1989**

NO.	PROVINCE	ARS	RATE KG/JERIB	VARIETY	SEED REQUIREMENT M.T.	AREA UNDER NEW VARIETY JERIB	BAGS OF UREA	BAGS OF D.A.P.	UREA M.T.	D.A.P. M.T.	EXPECTED YIELD M.T.	SEED & FERTILIZER M.T.
1	KANDAHAR	Maroof	28	Per-Sabak-85	7.00	250	250	125	12.50	6.25	157.50	25.75
		Panjwaie	28		56.00	2000	2000	1000	100.00	50.00	1,260.00	206.00
2	HELMAND	Shamalan	28	Per-Sabak-85	28.00	1000	1000	500	50.00	25.00	630.00	103.00
		Derweshan	28		28.00	1000	1000	500	50.00	25.00	630.00	103.00
3	WANGARHAR	Khogiani	28	Pak-81	31.00	1107	1107	553	55.35	27.65	671.73	110.35
4	GHAZNI	Ander	40	Bezostaya	5.00	125	125	63	6.25	3.12	65.62	14.37
		Dehyak	40		5.00	125	125	63	6.25	3.12	65.62	14.37
5	LOGAR	Charkh	40	Bezostaya	5.00	125	125	63	6.25	3.12	65.62	14.37
		Baraki Barak	40		5.00	125	125	63	6.25	3.12	65.62	14.37
6	WARDAK	Chak	40	Bezostaya	5.00	125	125	63	6.25	3.12	65.62	14.37
		Said Abad	40		5.00	125	125	63	6.25	3.12	65.62	14.37
7	PAKTIKA	Wazakhwa	40	Bezostaya	5.00	125	125	63	6.25	3.12	65.62	14.37
8	DEMONSTRATION PLOT		28		0.48	16	16	8				
Total					185.48	6248	6248	3127	311.60	155.74	3,811.57	648.69

Note: - Average yield expected 630 Kg/Jerib in Kandahar, Helmand, Khogiani.

Average yield expected 525 Kg/Jerib in Ghazni, Logar, and Wardak.

**B-2 Verification Status**

The shipment of seed and fertilizer to Helmand took place in October 1989, but the verification report came in March 1990, 5 months later.

As far as other ARSs are concerned the seed and fertilizer program was implemented as soon as the seed and fertilizer reached the ARSs and reports arrived relatively on time.

### **B-3 Constraints Identified & Solutions Proposed**

As is the case for every other activity in the AARRP communication between field and head office, and between ARSs represents a serious constraint. It may take months before the head office learns that something happened in a particular area.

### **B-4 Work Plan for Next Quarter**

VITA will not have any agricultural programmes because the agricultural activities with related personnel are to be transferred to DAI as of 31 March 1990.

## C. WOOD LOTS

### C-1. Completed Project Activities

VITA received about 25,000 poplar cuttings which were purchased by FAO from the Institute of Forestry at Peshawar. These cuttings are from eleven different clones of the following serial numbers.

<u>SERIAL NO.</u>	<u>CLONES</u>	<u>NO. OF CUTTINGS</u>
1.	S7C2	2,125
2.	S7C3	3,350
3.	S7C4	3,175
4.	S7C20	3,150
5.	1-72/60	1,025
6.	1-90/60	875
7.	1-63/51	1,250
8.	ST-92	1,125
9.	1-72/58	1,325
10.	1-262	725
11.	Mixed clones	<u>6,875</u>
	* TOTAL	25,000

\* NOTE: Each cutting makes 2 cutting.  
(25,000 X 2 = 50,000)

About 15,000 cuttings were sent to the Maroof ARS of Kandahar province and 15,000 to Khogyani district of Nangahar province. These cuttings will be planted in farmer-run nurseries for future distribution to farmers. Along with cuttings, one nursery man was sent to Maroof district and one to Khogyani district. These nursery men were trained in the proper handling and planting of cuttings. They were also equipped with sprayers, shears and the required chemicals.

The remaining 20,000 cuttings are to be planted in the Dara nursery, near Peshawar, for further observation and multiplication.

Seven thousand fast growing poplar cuttings were purchased by FAO from Turkey and forwarded to VITA for the reforestation program. It is planned that 4,500 of these will be sent to Ghazni, Logar, Wardak, Ghorband, and Maroof district in Kandahar. The remaining 2,500 will be planted in the Swat nursery. Each cutting

received is to be cut into two, making 14,000 for planting. Thus the poplar cuttings from Turkey, after cutting in two, were to provide these ARSs the following:

ARS	Cuttings
Logar	2,000
Wardak	2,000
Ghazni	2,000
Maroof	2,000
Ghorband	1,000

### **C-2 Verification Status**

Letters have been sent to all ARSs having Mulberry and Poplar nurseries. These letters asked agriculture staff to check seedlings and count the number which are suitable for transplanting. As of the end of March 1990, no information had been received on the state of the nurseries.

### **C-3 Constraints Identified and Solutions Proposed**

Lack of reliable and up-to-date information represents the single most important constraint.

### **C-4 Work Plan for the Next Quarter**

There will no longer be a program or plan for wood lot production or nursery establishments. Wood lot production, nursery, and reforestation activities were part of the agriculture program which has been shifted to DAI.

## **D. PLANT PROTECTION**

### **D-1 Completed Project Activities**

During this quarter, activities connected with plant protection are very limited due to snowfall and cold weather in most ARSs. Reports from warmer ARSs also did not arrive on time to be included in this quarter.

Plant protection personnel in the head office participated actively in a training course offered for agricultural staff and engineers. They were busy in preparing lecture notes and delivering lectures in classroom. For practical works, they had to prepare some chemicals. These chemicals are used for controlling of insect-pests from fruit trees in the dormant period, fungus and bacterial disease of vegetable crops and treatment of wounds in the stem of trees and eradication of gumuses in stone fruit bearing trees. Chemicals prepared were lime sulphur, board mixture and board paste. The plant protection staff also prepared list of chemicals needed for insect-pest control. These chemicals are easily available in Pakistan but not in Afghanistan.

The section also prepared plant protection subjects for the Voice of Radio Mujahideen. They prepared a recommendation for the use of 2-4 D chemical to be used on wheat fields for controlling broad leaf weeds.

### **D-2 Verification Status**

This section also suffers from lack of sufficient and timely information on the state of the crop in various areas. This lack of timely crop information is crucial for production of good crops. If disease or insect-pests strike and no protection or remedial measures are taken in time, the crop will suffer a great deal and in the case of sunpest or army worm attack, the crop may be partly or completely destroyed.

### **D-3 Constraints Identified & Solutions Proposed**

Most insecticides and fungicides and other farm chemicals are not available inside Afghanistan. This restricts the plant protection activities to a great extent.

### **D-4 Work Plan For Next Quarter**

The plant protection section is transferred to DAI from 1 April 1990, and doesn't figure in the future planning of VITA.

## **E. AGRICULTURAL EXTENSION**

### **E-1 Completed Project Activities**

The Agriculture Extension staff in the VITA head office compiled the forms previously received from the ARSs. These forms showed the total agricultural area, area under irrigation, rainfed area, land under various crops such as wheat, barley, rice, maize and forage crops, and the type and number of fruit orchards and animals in the district.

The extension staff prepared a series of recommendations to the farmers to be carried out in the coming spring. These recommendations are as follows:

1. Weeding of wheat fields both mechanically and by spraying herbicides like 2-4D before application of fertilizer.
2. Applying the second dose of Urea after the field is cleaned from weed and the wheat plant is about 5 to 6 inches high.
3. Establishment of fruit orchards and pruning of fruit trees and other related agricultural activities which take place in spring season.
4. Preparing charts to help ARSs agriculturists to recommend use of the proper amount of fertilizer and the proper time of application of fertilizer to various crops.
5. Recommending the appropriate time for establishing rice nurseries and the proper time for transplanting of seedlings to the fields.
6. Preparing lecture notes and giving lectures to field agriculturists who participated in training program in VITA-4.

### **E-2 Verification Status**

Reports finally arrived from Shamalan and Derweshan districts of Helmand on 15 March 1990. The seed and fertilizer was distributed to farmers as planned.

### **E-3 Constraints Identified & Solutions Proposed**

A lack of transportation to transfer goods and field staff over the area of ARSs is a constraint that needs to be removed by sending more motorcycles and other motor vehicles inside Afghanistan.

#### **E-4 Work Plan For Next Quarter**

VITA will no longer deal with agricultural projects from April 1990. The agricultural projects are to be transferred to DAI as of 31 March 1990.

## F. FARM MACHINERY

### F-1 Completed Project Activities

During the quarter, two Massey Ferguson 375 tractors were shipped to Asmar in Kunar province for rural rehabilitation projects and, one M.F. 375 tractor was shipped to Sarobi/Kabul. One belt type thresher was sold for Afs. 250,000 in Ghazni province.

Repair of three diesel pumps for Wardak and Ghazni tractors was completed.

Tractor and thresher operators from the ARSs were asked to participate in the training course offered in Peshawar during the winter season. They received both theoretical and practical training. In the morning they attended classroom lectures and in the afternoon practical work was performed, which consisted of leveling, ploughing, and maintaining the machine.

The farm machinery section has sent one M.F.375 tractor with front blade and trailer to Zurmat of Paktia for construction purposes. They are planning to send a well digging machine to Wazakhwa of Paktika very soon. The farm machinery section received a number of items of office supplies from RONCO to be delivered to the Ministry of Agriculture of the Interim Government. These include 15 electric calculators, 5 english electric typewriters, one plain photocopier, 15 steel filing cabinets and 24 brief cases. The items were a grant from USAID to the Ministry of Agriculture and Animal Production.

The farm machinery section also performed the following activities:

1. Four flour mills were purchased from Lahore and shipped to Kunar province.
2. Two moldboard ploughs were purchased from Lahore and shipped to Kunar province.
3. Nine M.F.375 tractors ordered by VITA and purchased by RONCO were received. They are parked in the yard and will be transferred to DAI.
4. Parts needed for ARS's tractors were purchased and delivered.
5. One poinjar drill from Kunar province was repaired.

## **F-2 Verification Status**

We have received reports from Wazakhwa, Wardak and Ghazni provinces very late, while reports from other ARSs have still to reach VITA head office.

## **F-3 Constraints Identified & Solutions Proposed**

Communication between head office and the ARSs is a major constraint which needs to be solved. The irregular communication usually causes delay in work activity. This irregularity is often due to closure of roads because of weather or other abnormal conditions prevailing in the country.

Fuel is not readily available in the ARSs and even when available is adulterated with water which damages fuel pumps of the tractors. The only proper solution would be to store the fuel in barrels and then to use it carefully.

## **F-4 Work Plan for Next Quarter**

Shipment of ten tons of wire to Hangu (IRC) to make it galvanised for gabion sheets later to be sent to ARSs depending upon the needs.

## COMPONENT 2: AGRICULTURAL INFRASTRUCTURE SERVICES

### A. IRRIGATION, ROAD AND BRIDGE REHABILITATION

#### A-1 Completed Project Activities

##### a. Karezes

The total number of requests for assistance with rehabilitation was 16,307 at the end of reporting period. A total of 1,162 requests for assistance were received during this quarter (Jan-Mar 1990), of which 218 karezes were rehabilitated as follows:

TABLE 3.

NAME OF ARS	NO. OF KAREZES CLEANED
Wazakhwa/Paktika	62
Charkh/Logar	25
BarakiBarak/Logar	38
Chak/Wardak	41
Sarobi/Kabul	52
Total	218

By the end of this reporting period 3,261 karezes were surveyed, designed and estimated out of which 2,252 karezes were sanctioned.

It is assumed that one kareze can benefit 60 families and can irrigated 400 jeribs of land on average. Hence the 218 completed karezes will benefit 13,080 families and will irrigate 87,200 jeribs or 17,440 hectares of land.

## b. Other Irrigation Projects

The total completed irrigation project during the first quarter of 1990 are ten of which six intakes in Chak/Wardak and four jui (canals) in Asmar/Kunar were completed.

## c. Roads

The completed roads during the first quarter 1990 were not reported by ARSs.

## d. Bridges

During the three months (Jan-Mar 1990) one completed path bridge in Chak/Wardak is reported.

The total number of other irrigation projects by the end of this report were 16,051, of which 846 projects were surveyed and 339 projects were designed and estimated. A total of 237 projects were sanctioned.

## e. Gabions

To date a total of 13,955 pieces of gabions and 3,340 kg of G.I.wire have been sent to provinces as follows:

**TABLE 4.**

PROVINCE	NO. OF GABIONS (PIECES)	G.I.WIRE (KG)
Logar	3,613	500
Ghazni	1,350	200
Kandahar	1,080	300
Kabul	1,170	400
Konar	3,247	1,150
Paktika	400	100
Wardak	1,902	450
Paktia	955	150
Baghlan	238	90
Total	13,955	3,340

## A-1.1 Projects Under Construction

### a. Karezes

The work of rehabilitation on 1,160 karezes was in progress during this quarter. The details are as follows:

**TABLE 5.**

PROVINCE	NO. OF KAREZES
Kandahar	74
Paktika	217
Logar	196
Ghazni	309
Wardak	146
Parwan	20
Baghlan	2
Kabul	146
Paktia	50
Total	1,160

### b. Other Irrigation Projects

During the quarter, work on 138 various irrigation projects was in progress. The details are as follows:

**TABLE 6.**

PROVINCE	TYPE OF PROJECT	NUMBER
Wardak	Spring	11
Ghazni	Intake	1
Takhar	Jui (canal)	5
Takhar	Flume	1
Kandahar	Jui (canal)	18
Baghlan	Jui (canal)	30
Baghlan	Wash (flood control)	1
Kunar	Jui (canal)	30
Kunar	Intake	1
Kunar	Flume	1
Kunar	Retaining wall	1
Kabul	Jui (canal)	38
Total		138

### c. Roads & Bridges

A total of 12 projects (which include 3 rehabilitated and 4 new roads, and 3 foot bridges and 2 motor bridges) were under construction during the quarter 1990.

### A-2 Verification Status

The status report shows the number of completed projects as well as projects under construction. Due to winter snowfall, the work progress is not satisfactory. Also communication between the head office and ARSs is not regular, therefore the completed project report was not received on time. For monitoring the project activities, a group of monitors from VITA Peshawar were sent to various ARSs and reported back, verifying the status of project activities.

### **A-3 Constraints Identified & Solutions Proposed**

- a. Weak communication between the head office in Peshawar and the ARSs is a problem especially during this quarter when heavy snowfall disturbed traffic between Afghanistan and Pakistan via Terimangal. A long time is required for an ARS officer to come to head office to solving his problems. It is recommended that wireless communication should be provided between head office and ARSs as well as between ARSs inside the country. This will save time and will increase efficiency.
- b. Poor transportation facilities are another problem. For supervising and monitoring the projects in a wide area, better transportation facilities are needed. It is recommended to provide vehicles for transportation of personnel as well as for transfer of project commodities and money to ARSs.
- c. Insufficient qualified personnel in ARS is another pressing problem. VITA arranged a three month training program course for upgrading the knowledge of the technicians which was completed at the end of Febuary 1990. Certificates were distributed to the participants. It is recommended that in the future training courses should be held for training personnel in technical fields. Additionally, the training of engineers is recommended inside Pakistan and abroad.
- c. Because of the ending of the current contract, program funds were limited by the budget remaining, thus limiting field operations.

### **A-4 Work Plan For Next Quarter**

The new Cooperative Agreement that was effective on 15 March, when the agreement was signed by the AID/REP, grant officer, calls for the submission of a consolidated implementation plan within 45 days of that date. This will include detailed plans and schedules for all ARSs indicating the level of operations, the priorities given to expected works, and any changes in location, size, or organisation, of the ARSs.

This planning will be the top priority at the beginning of the quarter, but field operations will continue as before while the planning is going on. When the new implementation plan has been approved, the field operations will be modified to reflect those plans.

The operations of each ARS will be funded through an imprest account, providing funds that can be used on any approved projects that are under way. This will allow better use of funds than was possible when money was allocated for specific jobs, so that more money was needed in the field to keep each separate project in funds.

## **COMPONENT 3: TRAINING**

### **A. IN-SERVICE TRAINING**

VITA considers training as an integral part of its overall activities. To carry out a sound and organised training program, a training section was added to VITA. The training section from time to time implemented a number of in-service training programs for agriculturists, engineers and technicians working in the sixteen Area Rehabilitation Schemes (ARS) in twelve provinces of Afghanistan.

The curricula of the training programs were designed in such a way as to enable the participants to work effectively and solve the problems of their clientele. These programs helped the personnel of the ARSs to work with local shuras, concerned commanders and the beneficiaries in a more mutual understanding atmosphere.

Most of the teachers and instructors were VITA senior engineers and agriculturists. In some cases VITA hired agriculturists and engineers from other NGOs to teach classes. To date VITA has completed 13 in-service training programs for its employees.

#### **A-1 Completed Project Activities**

The following in-service training courses have been completed:

##### **a. Agriculture Service Course**

The course began on 10 December 1989 and ended on 6 March 1990. Thirty agriculturists working in 16 ARSs participated in the program. All the participants successfully completed the course and were awarded certificates. All the instructors except one were from the senior agriculturists of VITA.

The program consisted of class work and field work. As part of the program, the trainees were given the opportunity to visit seed multiplication farms and research farms. They visited VITA nurseries in Swat and Dara and took part in various horticultural activities, planted seeds, pruned trees, applied chemicals, budded and grafted trees, dug out budded trees, packed trees for transportation to Afghanistan to be planted in orchards.

Three sessions of ninety minutes each were held everyday, five days a week. The sessions were composed of lectures, seminars and discussions which provided the trainees with opportunity to take an active part in the class activities and express themselves freely.

There were 30 trainees in the Agricultural Services course, of these 9 were college (agriculture) graduates, 12 high school graduates and 9 had less than 12 grade education. All the trainees had some work experience.

The participants of the Agriculture Services course were given a chance to attend a one week long practical training program, organised by the Food and Agriculture Organisation (FAO) in collaboration with the Turnab Research Farm in Peshawar. Orchards, nurseries and seeding technology, agriculture extension, fertilizer application and storage, farm chemicals and mathematics were taught in the course.

The lecture notes and reading material were prepared in Dari and were distributed to the students during the course.

#### **b. Agriculture Infrastructure Course**

The course began on 3 December 1989 and ended on 28 February 1990. There were 31 participants in the course, who completed the program successfully and were awarded certificates. All the participants were VITA employees working in 16 ARSs inside Afghanistan. There were 16 college (engineering) graduates, 6 were high schoolers and the rest had less than a 12 grade education.

The course was taught by engineers of VITA and other organizations. Four instructors were from VITA staff and four from IRC. Surveying, construction math, drawing, construction 1, 2, and 3 and special topics were taught in the course. The participants were provided with the opportunity to see the bubble irrigation system installed in Dara, practised surveying in the field, and visited the soil laboratory at IRC. Lecture notes were prepared in Dari and distributed to trainees during the course.

#### **c. Nursery Growers Course**

A short practical course for the nursery growers was organised in Peshawar. Eight trainees from Baraki Barak, Charkh, Chak and Maroof took part in it. The course was started on 2 January 1990 and ended in February 1990. The trainees spent most of their time in Dara and Swat nurseries to learn more about preparation of the soil, planting seeds, digging out and planting trees, wrapping trees for transportation to distant places, and taking care of nurseries. They also took part in a 3-day practical training activity organised by FAO at the Forest Institute of Peshawar. They learned how to identify poplar cuttings, to measure land for establishing nurseries, to prepare soil for cuttings, and to plant and take care of cuttings.

#### d. Tractor and Thresher Operating Course

Another course was organised for tractor and thresher operators in Peshawar. 22 operators from the ARSs of Ander, Baraki Barak, Wazakhewa, Chak, Maroof, Saidabad, Ghazni, Sarobi and Farkhar took part in it. The operators were provided the opportunity to learn through practice about the smooth operation and maintenance of tractors, threshers, and other farm machinery.

**Table 7.**

#### COURSES, SEMINARS AND WORKSHOPS ORGANIZED BY VITA 1988-90

No.	Type of Training	No. of Participants	Starting Date	Ending Date
1	Workshop for ARSs officers	16	11/27/88	12/3/88
2	Course for ARSs engineers	15	12/4/88	1/4/88
3	Course for ARSs Agriculturists	17	12/15/88	2/15/88
4	Course for Engineers	21	12/29/88	2/29/88
5	Seminar for VITA sr. staff	7	4/23/89	4/30/89
6	Course for tractor operators	11	4/25/89	5/25/89
7	Seminar for sr. Agr. & Eng.	18	7/10/89	7/13/89
8	Practical training of ext. agents in apricot drying	12	7/17/89	7/22/89

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	Type of Training	No. of Participants	Starting Date	Ending Date
9	Seminar for ARS officers	10	9/29/89	9/30/89
10	Course for ARS engineers	31	12/3/89	2/28/90
11	Course for ARS Agriculturists	30	12/17/89	2/28/90
12	Course for tractor operators	28	1/2/90	-
13	Course for Nursery men	8	1/2/90	-

#### A-2 Verification Status

The courses given to the various groups of VITA staff are recorded in the Training Section, along with attendance records. The end of each course is marked by a graduation ceremony, with certificates being presented to the trainees who have successfully completed the courses.

#### A-3 Constraints Identified & Solutions Proposed

The scheduling of courses at times that will least interfere with the work at the ARSs is a challenge. Winter months have been preferred, particularly for the agriculturists, in the past. With only the rural rehabilitation technicians and engineers to schedule in the future, the problems of scheduling should be lessened.

#### A-4 Work Plan For Next Quarter

The primary task for the Training Section in the coming quarter is the preparation of a training needs assessment, followed by an implementation plan that will describe the courses to be arranged and the schedule of courses for the next year. Several items of equipment for the training program will be ordered in the initial procurement request under the Cooperative Agreement. These include a TV monitor and Video Cassette Recorder (VCR) capable of playing both American NTSC and European/Pakistani PAL/SECAM cassettes. An overhead projector and a double-cassette tape recorder will also be ordered.

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## COMPONENT 4: MISCELLANEOUS PROJECT ACTIVITIES

### A. OFFICE VISITORS

1. The Ministry of Agriculture and Animal Production requested VITA and USAID to help the MAA in various aspects of agriculture rehabilitation and development. Among all urgent rehabilitation and reconstruction needs first priority is given to training of agriculture extension personnel and training of a large number of farmers. This would be short-term training.

USAID studied the proposals and the possibility of supporting such training and invited two prominent training experts from the U.S.A. to study the feasibility of this type of training. The experts were professors Robert E. McCorkle and Professor H. Clyde Hostetter from California Polytechnic University.

The experts came in December 1989 for a period of two weeks. During their stay in Peshawar, they met and talked with various NGO officials involved in education and training. They first met Dr. Abdul Wakil and Eng. M.M.Sediq, COP/VITA. Mr. Wadud Zafari, Mr. Arif Noori and Mr. Mir Ayub, senior advisors to VITA, assisted the visitors in arranging appointments with AIG officials and others. They met Dr. Hashmatullah and Sayed Habiburahman, president of agriculture extension, and other senior ministry staff.

They also met Dr. Azangul, director, and Mr. Abdullah Naik, deputy director, of the Agriculture Survey of Afghanistan, Dr. Abdul Qahar Samin, director of training courses of ARC and advisor to the ministry of agriculture of AIG. The experts participated in the ongoing training program conducted by VITA training office for upgrading the level of knowledge of both technicians of rural works and agriculturists. Experts spent some time in observing the methods of teaching and the training facilities available. They also had a meeting with Nebraska University team leader and had discussions. The experts concluded their work in Peshawar and left for Islamabad in early January.

2. Mr. Howard J. Opper, International Training Specialist from the U.S. Department of Agriculture Office of International Cooperation and Development, arrived in Peshawar on Jan. 9, 1990. Mr. Opper spent most of his time in the training courses which were going on in VITA. He was also received by Dr. Hashmatullah and other senior staff of the ministry.

Mr. Opper also talked with some officials of University of Nebraska and Mr. Sardar Roshan in the education and training department.

3. Mr. Jerry Rann and Mr. C. Richard Edwards arrived in Peshawar in March to study the sunpest and locust problems in Afghanistan. The team had meetings with Swedish Committee officials and Mr. Wais from DAI and Khalilullah from VITA. The experts delivered a lecture in DAI headquarters in regards to locust and sunpest control in Afghanistan and hope to innitiate an AID sponsored program for next fall and spring to work in Badghis province.

In the first year at least 20 high school graduates or higher level will be trained for a three-month period in Peshawar and then be sent to the province along with equipment and chemicals to train the applicators on the spot.

## B. CONSULTANTS

1. Dr. Richard Gibson came to Pakistan on 3 January 1990 as a VITA consultant to prepare a proposal to the United Nations Development Program (UNDP) for the implementation of rural rehabilitation activities in Kunar and Paktika provinces. This had been prompted by interest shown by UNDP in having VITA assist in carrying out planned activities in those two provinces and an indication from the AID/REP office that such a program would be acceptable under the new Cooperative Agreement which was then being written. Dr. Gibson met with VITA staff and other NGO officials in Peshawar, as well as UNDP and UNOCO officials in Peshawar and Islamabad, before leaving for the U.S.A. by way of Geneva for further consultations with UN officials at the end of January.

2. Mr. Louis Mitchell, who had served as acting Chief of Paarty for VITA last summer during Eng. Sediq's consultancy trip to the States, arrived in mid-January to help prepare and negotiate the Cooperative Agreement with AID/REP. This agreement is to cover the VITA activities in rural infrastructure rehabilitation activities for the two years beginning 1 April 1990. After initial meetings in Peshawar, Mr. Mitchell spent much of his time in Islamabad meeting with AID/REP program, contracting, and financial officers working out the details of the agreement. He completed his preparation of the scope of work of the agreement and the accompanying budget and departed at the end of January from Islamabad.

3. VITA consultant Eng. Abdul Tawab Assifi came on 7 March 1990, as senior technical consultant on engineering matters. Eng. Assifi is a former governor and president of Helmand province, former president of rural development and later the minister of mines and industry of Afghanistan before the coup. It was hoped that he could visit Kajakai Dam to help assess maintenance needs of this key installation. However, travel to the site was not possible. Eng. Assifi spent considerable time conferring with AIG, USAID, and VITA staff and assisting in the preparation of the implementation plan for the coming two years under the Cooperative Agreement. He

also reviewed engineering standards being used by VITA engineers and made suggestions for their improvement. He was expected to depart in early April.

4. Mr. Henry R. Norman, president of VITA, Inc., arrived in Islamabad on 26 March 1990 for a two-week stay. After initial meetings with AID/REP officials he came to Peshawar on 27 March. He was able to review the status of the project under the present contract, which was ending on 31 March, as a prelude to beginning the preparation of the implementation plan for the new Cooperative Agreement. Home office support and the recruiting of additional expatriate staff were discussed in meetings with VITA staff, as were the logistics of space changes called for by the departure of the agriculture staff to DAI.

Mr. Norman and Eng. Sediq prepared a briefing concerning the way in which VITA would meet its responsibilities in developing the implementation plans for the various activities of the project in the first weeks of the new agreement.

**AFGHANISTAN AGRICULTURE & RURAL  
REHABILITATION PROJECT**

USAID 306-0204

**APPENDIX**

TO THE

**Quarterly Report**

for the period

January through March 1990



**Volunteers in Technical Assistance (VITA)**  
Arlington, Virginia

**Eng. M. M. A. Sediq, Chief of Party**  
PESHAWAR, PAKISTAN

April 1990

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FIGURE 7

RWAMAR

STATUS REPORT  
Agricultural Infrastructural Activities

March 15th, 1990

KIND OF PROJECTS	REQUESTED	SURVEYED	DESIGNED	ESTIMATED	SANCTIONED	UNDER CONSTRUCTION	SUSPENDED	COMPLETED	MONITORED
<b>IRRIGATION</b>									
a) Karez	16307	3261	3261	3261	2252	1160	26	1036	1252
b) Other	16051	846	339	339	237	138	11	88	101
TOTAL	32358	4107	3600	3600	2489	1298	37	1124	1353
<b>WATER SUPPLY (POTABLE)</b>									
	815	19	5	5	1	0	0	1	1
<b>ROADS</b>									
a) New	584	32	21	21	9	4	0	5	7
b) Rehab.	1964	34	12	12	8	3	0	3	3
<b>BRIDGES</b>									
a) Motor	6151	28	11	11	6	2	1	3	3
b) Foot/Cable	15	10	10	10	8	3	1	4	4
<b>TOTAL</b>	<b>41887</b>	<b>4230</b>	<b>3659</b>	<b>3659</b>	<b>2521</b>	<b>1310</b>	<b>39</b>	<b>1140</b>	<b>1371</b>

NOTE:

1. Karezes under construction include 1160 inside ARS.
2. The total number of irrigation projects under construction (1298) is based on reports reaching Peshawar. The actual total is probably higher, but the data is still in the field with the staff.
3. Of the projects which are either completed (1140) or under construction (1310), a total of 1371 or 55.37 % have been independantly monitored by VITA staff to confirm that work is in progress or completed. Further, some of these subprojects have been monitored as many as three or four times.
4. Based on requests received to date for rural roads (more than 2548). The planning section has calculated them. The average length of a typical rural road is 15 KM. This figure will be use in the future for planning purposes.

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PRICE OF AGRICULTURAL COMMODITIES (Afs)

January 30th, 1990

REGIONS	PROVINCES	WHEAT	REGIONAL	OXEN	MEAT		FERTILIZER		REGIONAL	REGIONAL
		PER SEER (7 KG)	AVERAGE (WHEAT)	PER HEAD	(1 KG) MUTTON	BEEF	(1 BAG= 50 KG) PHOSPHATE	UREA	AVERAGE (FERT.PHOS)	AVERAGE (FERT.UREA)
1	KABUL	1200	812.50	170,000	900	700	1900	1500	1850.00	1625.00
	LOGAR	700		140,000	700	600	2200	2000		
	PAPWAN	700		130,000	700	550	1600	1500		
	NAFISA	650		130,000	700	600	1700	1500		
2	GHAZNI	700	675.00	135,000	700	600	2000	1700	2050.00	1700.00
	PACTIKA	650		130,000	700	600	2100	1700		
3	SHORE	---	725.00	---	---	---	---	---	2350.00	2150.00
	PAMIYAN	800		130,000	650	550	2600	2400		
	KARDAK	650		140,000	700	600	2100	1900		
4	PAKTIYA	750	750.00	125,000	800	650	2000	1700	2000.00	1400.00
5	ZABUL	650	675.00	120,000	700	550	2300	2000	2425.00	2075.00
	DAYDAHAR	700		130,000	750	600	2300	2100		
	URUZGAN	700		130,000	700	600	2600	2200		
	HELMAND	650		125,000	700	600	2500	2000		
6	FARAH	700	700.00	125,000	700	600	2500	2200	2600.00	2166.67
	HERAT	---		---	---	---	---	---		
	FARSHIS	750		125,000	700	600	2600	2200		
	NIMROZ	650		130,000	700	600	2700	2100		
7	FARYAB	850	750.00	130,000	700	600	2300	1900	2000.00	1700.00
	JARZJAN	650		120,000	650	550	1700	1500		
	BALAH	---		---	---	---	---	---		
8	KUNDUZ	650	666.66	125,000	700	600	1800	1300	2500.00	1900.00
	BASHLAN	650		130,000	700	600	1700	1500		
	SAMANGAN	700		135,000	700	600	1500	1000		
9	BADAKHSHAN	800	725.00	130,000	750	650	2000	1700	1800.00	1500.00
	TAKHAR	650		125,000	650	550	1600	1300		
10	MUNAR	550	733.33	120,000	650	550	2000	1700	2633.33	2333.33
	NANJARHAR	950		140,000	900	800	3000	2700		
	LAGHMAN	700		135,000	750	650	2900	2600		
NATIONAL AVERAGE			721.24						2220.83	1855.00

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PRICE OF AGRICULTURAL COMMODITIES (Afs)

February 28, 1990

REGIONS	PROVINCES	WHEAT	REGIONAL	OXEN	MEAT		FERTILIZER		REGIONAL	REGIONAL
		PER SEER (7 KG)	AVERAGE (WHEAT)	PER HEAD	(1 KG) MUTTON	BEEF	(1 BAG= 50 KG) PHOSPHATE	UREA	AVERAGE (FERT. PHOS)	AVERAGE (FERT. UREA)
1	KABUL	1000	800.00	160,000	900	700	2000	1800	2125.00	1925.00
	LOGAR	750		140,000	700	600	2300	2000		
	PARWAN	700		130,000	700	600	2000	2000		
	KAPISA	750		130,000	700	600	2200	1900		
2	GHAZNI	650	650.00	125,000	750	600	2100	1900	2050.00	1850.00
	PARTIA	650		120,000	800	600	2000	1800		
3	GHORE	----	600.00	----	----	----	----	----	2300.00	2000.00
	BAMIYAN	----		----	----	----	----	----		
	WARDAK	600		130,000	650	550	2300	2000		
4	PARTIA	700	700.00	125,000	875	650	2000	2000	2000.00	2000.00
5	ZABUL	700	700.00	120,000	700	600	2500	2300	2525.00	2300.00
	KANDAHAR	750		125,000	800	650	2400	2200		
	URUZGAN	700		125,000	700	600	2700	2300		
	HELMAND	650		120,000	700	600	2500	2400		
6	FARAH	700	700.00	125,000	700	600	2700	2500	2750.00	2500.00
	HERAT	----		----	----	----	----	----		
	PACGHIS	----		----	----	----	----	----		
	NIMROZ	700		130,000	700	600	2800	2500		
7	FARYAB	----	725.00	----	----	----	----	----	1600.00	1450.00
	JAWZJAN	750		120,000	650	550	2000	1800		
	BALKH	700		120,000	650	550	1200	1100		
8	KUNDUZ	700	733.33	125,000	700	600	1900	1500	1800.00	1466.67
	BAGHLAN	700		125,000	650	550	2000	1500		
	SAMANGAN	800		130,000	700	600	1500	1400		
9	BADAKHSHAN	900	800.00	130,000	800	650	2300	1900	2150.00	1800.00
	TAKHAR	700		125,000	700	600	2000	1700		
10	KUNAR	600	733.33	120,000	700	550	2000	1900	2450.00	2533.33
	NANGARHAR	900		140,000	900	800	----	3000		
	LAGHMAN	700		130,000	800	650	2900	2700		
NATIONAL AVERAGE			714.17						2175.00	1982.50

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PRICE OF AGRICULTURAL COMMODITIES (Afs)

March 31st, 1990

REGIONS	PROVINCES	WHEAT PER SEER (7 KG)	REGIONAL AVERAGE (WHEAT)	OXEN PER HEAD	MEAT (1 KG) MUTTON BEEF	FERTILIZER (1 BAG= 50 KG) PHOSPHATE UREA	REGIONAL AVERAGE (FERT.PHOS)	REGIONAL AVERAGE (FERT.URA)		
1	KABUL	700	675.00	170,000	1100	900	2000	1800	2125.00	2000.00
	LOGAR	650		130,000	700	550	2000	2200		
	PARWAN	650		125,000	750	650	2200	2000		
	KAPISA	700		135,000	750	600	2300	2000		
2	GHAZNI	650	675.00	130,000	700	600	2300	2000	2200.00	1900.00
	PAKTIKA	700		125,000	850	600	2100	1800		
3	GHORE	----	650.00	----	----	----	----	----	2400.00	2000.00
	BAMIYAN	----		----	----	----	----	----		
	WARDAK	650		130,000	700	600	2400	2000		
4	PAKTIA	800	800.00	130,000	900	700	2100	2000	2100.00	2000.00
5	ZABUL	700	687.50	125,000	700	600	2500	2300	2475.00	2275.00
	KANDAHAR	700		125,000	750	600	2300	2100		
	URUZGAN	700		120,000	700	600	2700	2300		
	HELMAND	650		120,000	700	600	2400	2400		
6	FARAH	700	800.00	125,000	700	600	2600	2600	5200.00	5000.00
	HERAT	700		125,000	700	650	2400	2200		
	PADGHIS	1100		120,000	650	550	2800	2700		
	NIMROZ	700		130,000	750	650	2600	2500		
7	FARYAB	----	650.00	----	----	----	----	----	1200.00	1100.00
	JAMZJAN	----		----	----	----	----	----		
	BALKH	650		125,000	600	500	1200	1100		
8	KUNDUZ	700	700.00	120,000	650	550	1700	1500	1600.00	1466.67
	BAGHLAN	650		125,000	650	550	1800	1500		
	SANANGAN	750		130,000	650	550	1300	1400		
9	BADAKHSHAN	----	0.00	----	----	----	----	----	0.00	0.00
	TAKHAR	----		----	----	----	----	----		
10	KUNAR	600	750.00	115,000	700	600	1900	1900	2533.33	2533.33
	NANGARHAR	950		135,000	950	800	3000	3000		
	LAGHMAN	700		130,000	800	650	2700	2700		
NATIONAL AVERAGE			638.75						2183.33	2027.50

T R A N S L A T I O N

In the Name of Allah, the  
Merciful and Compassionate

Hezb-i-Islami Afghanistan  
Office of Wahdat-Pul-e-Khumri, Baghlan Province

---

October 16, 1989

Baghlan - Shahr-e-Jadeed, Tayekan Village

Dear brother Eng. Mir Moh'd Sediq

Assalamo Alaikum-wa-Rahmatullah-wa-Barakatuho,

I send greetings from the hot intrenched positions of the holy war ground of my beloved country. At the same time, I would like to draw your attention to the volume of work accomplished by Eng. Moh'd Ashraf in Ghorri Area of Pul-e-Khumri district and which was highly appreciated.

The inhabitants of the district are highly impressed and very happy with the project activities and accomplishments, and we take this opportunity to thank you sincerely for the valuable services provided by you to your fellow country-men and to this particular part of your country.

Once again we would request you to extend more such beneficial projects to this area of your country.

Thanking you.

Abdul Majid  
Financial Officer  
Hezb-Islami, Afghanistan

DATE : 12/3/90  
TO : PROVINCIAL FILES  
FROM : NUZHET SARDAR  
RE : REPORT OF WARDAK FOR THE MONTH OF FEBRUARY AND  
MARCH 1990

*Nuzhet Sardar*

-----  
According to the informant Eng. Nasari who arrived one week back, the work on the projects undertaken by VITA is progressing.

VITA have cultivated two nurseries recently, each on 10 jeribs of land having apricots, apple and almonds. The cultivation of the nursery by the name of Nazak Khei has reached completion while the nursery by the name of Durani Khei is still under cultivation.

The total completed projects are 408 and projects under construction are 160. Total surveyed projects are 1000. In the month of February and March 1990, 48 karezes reached completion and 160 are still under construction to date. All sorts of roads in the area needs to be rehabilitated. The local people now and then works on the damaged roads to rehabilitate them, using local material. In the months of cold season the work activity on karezes is not disturbed because snow is on top of the land and it keeps the land hard, while the work on intakes and diversions gets slow in winters as the land is covered with snow and the water is too cold. About 14 diversion, 4 intakes and 4 bridges have reached completion. For the construction of intakes, gabions are provided by VITA while the rest of the work is done by the local people themselves. The construction material is brought by them and used in the construction.

Wardak ARS like the others faces some difficulties and problems that needs to removed or abolished. The major problem faced by the ARS is shortage of transport facilities. A motor vehicle is needed for the transfer of both construction and other commodities and VITA staff.

Another problem of the ARS is that work activity in the area is delayed due to not getting the finances well on time. This needs to be taken into consideration for quick completion of work.

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Some of the prices of agricultural and other commodities are stated as follows:

COMMODITY	UNIT	PRICE IN AFS.
Wheat	7 kg	1000
Corn	"	600
Rice	"	2000
Sugar	"	2500
Veg. Ghee	16 kg	7000
Petrol	1 gal.	3000
Deisel	"	1000
Kerosene	"	900

## VITA

### Agriculture Rehabilitation Project Goshta District of Nangarhar.

#### 1. General Features:

Goshta is one of ten districts (Woleswali) of Nangarhar province. It is located in the north-eastern part of the province, surrounded by Kunar province, Iyalpoor and Kama districts of Nangarhar and NWFP of Pakistan. Goshta is surrounded by average size mountains in the west, north, east and Kunar river in the south. Its estimated elevation from sea level is 600 m. In summer, its weather is hot and dry and in winter it is mild but sometimes the temperature drops to below zero. It was under the rule of Kabul regime until 1988. It was liberated after great sacrifices by its people and Mujahideen.

#### 1.1. Population

Goshta has a population of 40,000 people. According to the information gathered by VITA surveyers, recently, 11,000 persons are men, 13,500 women, and the rest are children under age 17. It is estimated that around 30 percent of the population have taken refuge in Pakistan around 40 percents were forced to go to Moman Darah and Mama Khil, 3-5 Km from the district. The men from these two places, occasionally travel to the district to look after their farms and property. The population of Goshta is very homogenous in the sense that almost all of its people are Pushtoon, speaking the same language, Pashto.

The main Pushtoon tribes in Goshta are Khaja Zai and Mohmond. Mohmond, the largest in number is divided to sub-tribes such as Khoga Khil, Atmar, Musa khil, Eisa Khil and Mati Khil. Most persons between 18-40 of age are actively involved in Jihad, but those over 40 are engaged in farming.

#### Villages and Population before War:

1.	Ragha	4000
2.	Khwazy	5200
3.	Gunda ghar	4200
4.	Goshta	4900
5.	Alkhi	5700
6.	Kharbardi	4100
7.	Soordag	4400
8.	Surband	4300
9.	Moshwanai	1200
10.	Lachapoor	1400
11.	Baila	600

## 1.2. Social and Political Organization:

People of Goshta, like other Pushtoon tribes had a hierarchial social organizations and leadership. Maliks and Khans were superior in the society and they were asked to solve the conflicts between individuals and groups. In the old time, prior to the coup of 1978 and before Jihad movement started, even Khans and Maliks could solve big cases of conflicts such as murder, kidnapping and etc.

The eleven years of war against the occupation of Russians and communists rule brought changes and established a new social order and leadership. Commanders fighting in the field and Jihadic organizations gradually replaced the Khans and Maliks. Although the position of Khans and Maliks somewhat are weakened but still they and the elders of the villages become members of village Shora, established by the fronts to solve the disputes and conflicts in the society. Most of these village Shoras extend help and facilitate the implementation of the developmental programmes drawn up by the NGOs in Pakistan. At the same time, there is a field commanders Shora which plans, coordinates and evaluates the cooperation and joint operations among the parties in their area. At present there is a such Shora in Goshta, composed of HIA, JIA, NIFA, Ittehad and Harakat-e-Ingelab Islami.

The people live in the extended families, that is all married and single brothers, sisters, even uncles live together at the same compound. If they work on family farms or elsewhere, they support each other and spend the earnings collectively. This system provides them with opportunity to divide the work of earning among the males of the family. Some stay in the village to look after the family and work in the family farm and others travel to other provinces and even other countries in search for work.

## 2. Agricultural activities:

Since Goshta has a mild climate in the winter, double cropping is possible. It is estimated that over 50 percents of cultivated land are double cropped every year. The occupation of the majority of people are farming.

### 2.1 Land Ownership:

Those having 1-15 jeribs of farm land, farm themselves and usually do not hire farm labors. Those having from 16 to 100 jeribs, they would hire labors in addition to his work and his family members. The number of hired labor is based on the amount of the farm. There are few people who have more than 100 jeribs. Most of these people are not in Goshta and the land is under the supervision of Mujahideen. Mujahideen give the land to a farmer to farm. Mujahideen will get 30-40 percent while the farmers get

60-70 percent. Those who farm their land (1-100 jeribs) have to pay to the Mujahideen organization in their areas around ten percent of their production as Oshur. Oshur is an Arabic word, means, 1/10.

## 2.2 Agriculture Area:

The total area of Goshta is 168 sq. km. The estimated arable land is 75,000 jeribs and the estimated cultivated area is 48,750 jeribs of which 29,250 jeribs are under irrigation and 14,625 jeribs are rainfed. About 26,250 jeribs are fallow and the rest 4,800 jeribs are range land.

## 2.3 Agricultural Activities:

The majority (90%) of grown up male are engaged in agriculture and Jihad. Crops grown are wheat, barley, corn and rice. In addition, the farmers are engaged in animal raising. The main types of animals raised are sheep, goats and cows. The average yields of the main crops are low as a result of poor soil, scarcity of improved seeds, chemical fertilizers, farm power and agri-chemicals.

### Production under irrigation kg/jerib

Wheat	350 kg
Corn	560 kg
Rice	1120 kg
Mungbean	105 kg

### Production under rainfed kg/jerib

Wheat	210 kg
Corn	245 kg
Mungbean	105 kg

Some vegetable crops like turnip, spinach, tomato and egg plants are grown throughout the year for local consumption, clover, alfalfa and mungbean are produced for livestock. Few orchards (100 jeribs) of pear, loquat, oranges, apricot, peaches and plums are raised for domestic use.

Animal raising combined with crop raising for milk and meat is a common practice among the farmers. The range land is in fair condition despite the destructive effect of war, it makes a good pasture for cattle, sheep, goat and dairy cattle.

## 2.4. Availability of Production Inputs:

Before the coup of 1978 some production inputs such as improved seeds, chemical fertilizers (urea and DAP) were provided by the government in a subsidized price. Agriculture extension

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services were also available and the extension agents through demonstration plots, personal contacts, farm visit and mass communication were rendering great services to the farmers.

Now improved seeds do not exist and the farmers use the degenerated seeds year after year. Urea and DAP could not be provided by the Kabul regime. Some urea and DAP are brought from Pakistan. The price of a bag of urea is over 1700 Afs and a bag of DAP is more than 2000 Afs, if available. Since the farmers are poor, they cannot afford to buy.

Agriculture machinery, like tractors, threshers, water pumps, sprayers are not available in the district. 50% of draft animals were destroyed in the war and there are only 150 oxen in the entire district. The oxen should be bought from Pakistani markets. The price of one ox is ranging from 50,000 to 100,000 Afs in Peshawar.

Area under crops - jerib

	<u>Irrigated</u>	<u>Rainfed</u>
Wheat	20,000	10,225
Rice	12,150	-
Corn	8,000	-
Fruits	100	-
Vegetables	4,000	-
Others	5,000	4,400

Changes in crop production during 11 years of war - Tons

	<u>1978</u>	<u>1989</u>
Wheat	9,800	3,620
Rice	6,304	2,100
Corn	2,800	1,200
Vegetable	5,000	1,000
Fruits	140	80
Others	50	90

2.5. Sources of Irrigation Water:

The main sources of irrigation is the river of Kunar and rain. Irrigation water is provided from the Kunar river by a diversion dam. The canal that takes the water to the farming area is 15 km long and 4 m wide. Water is available all year long which enables the farmers to have double crops in one year. Other sources such as wells, deep wells and karezes are not present. The intake of the canal is not concreted and every year in the time of water rise the intake is damaged and the farmers suffer from the shortage of water for sometimes.

### 3. War Damage in the District:

Afghanistan, under the communist rule, has experienced great devastation in all aspects of its social and economic life in the last 11 years. Goshta district was not an exception. Burning of its orchards by bombardment estimated over 20%, destruction of farm structure 20%, destruction of irrigation systems and networks 30%, growth of weeds and shrubs due to abandonment of farm land 50% and presence of mine 10%.

#### 3.1 Percentage of Damage in the District:

Roads	80%
Schools	100%
Hospitals	100%
Storage facilities	100%
Other public utilities	20%
Orchards	30%
Irrigation systems	30%
Other agricultural infrastructures	50%
Forest trees	25%
Oxen and other animals	50%

### 4. Conclusion:

The background information and the profile on Goshta district show that more than 90% of its population is engaged in agriculture and most of the farmers are small farmers. As other areas of Afghanistan, the district has been damaged socially and economically during the war. Lack of security, the intensity of war and the miscalculated policy of the puppet regime of Kabul caused severe devastation in all aspects of social and economic life of the district.

Farmers and the rural population were hit very badly. The stoppage of movement of farm facilities and agriculture production inputs to rural areas left the farmers of the district without help and this resulted in severe agricultural production decrease. In order to rehabilitate the agriculture of the district, it is imperative to plan and implement an agricultural development project in the district.

### 5. The Project:

5.1 Name of Project: Goshta Agriculture Rehabilitation Project

5.2 Purpose and Goal:

To raise and improve the level and standard of living of the people especially small farmers of the district through enabling them to increase their agriculture production.

### 5.3 Description of Beneficiaries:

This project will assist 5715 families ( $40000/7 = 5715$ ) most of them (90 percents) small and needy farm families. The project will enable them to revive their agriculture and produce more.

### 5.4 Description of the Project:

The farmers are in urgent need of the following agriculture production inputs and agricultural services:

#### 5.4. 1. Improved seed

Since the seed grown in Goshta is degenerated and does not produce satisfactorily, VITA is going to replace it with PAK-81 or Pirsabak-85, both high yielding wheat varieties for the low altitude.

#### 5.4. 2. Chemical Fertilizers

High yielding (improved seeds) varieties give satisfactory results in the presence of sufficient water and chemical fertilizers. So VITA will provide the farmers with urea and DAP (50 kg of urea/jerib and 25 kg of DAP per jerib). All the fertilizers will be transported from Pakistan or partly provided from inside.

#### 5.4. 3. Agri-Chemicals

#### 5.4. 4. Farm Power:

As was stated earlier, 50% of the oxen were destroyed in the war. VITA may replace them or it will provide the farmers with tractors and the necessary equipments.

#### 5.4. 5. Threshers:

In order to enable the farmers to collect their harvest soon and clean the land for the second crop, VITA will provide some threshers to farmers.

Note: The terms and conditions of providing the farmers with the inputs and services should be worked out after negotiating with the farmers.

#### 5.4. 6. Farm Labour:

About 70% of the population took refuge in Pakistan or moved to other areas inside Nangarhar province. Some took active part in Jihad which caused severe shortage of farm labour. In implementing this project we may

encourage the people to move to their farms and district.

5.4. 7. Irrigation:

In order to assure sufficient water for irrigation, VITA can concrete the intake of the canal or reinforce it with gabions and other solid materials.

5.4. 8. Agricultural Credit:

In the absence of an organized system of agricultural credit, local money lenders who would charge exorbitant interest rates, are present in the area and reap the income of the farmers. To enable the farmers to become free from the money lenders domination, VITA will devise a system of agricultural credit to enable the farmers to obtain farm inputs and facilities without going to the local money lenders.

Date : 12/2/90

To : Provincial Files

From : Nuzhet Sardar

Re : Report of Logar for February 1990

*Nuzhet Sardar*

VITA had sent four tractors which have been used for preparing agricultural land for sowing seeds. It has worked for about 400 farmers each having four to five jeribs of land. The tractors worked on rent of Afs. 800 per hour.

The threshers sent by VITA worked well in the agricultural sector. They were used for threshing of wheat grain and working of mill which is used for crushing of wheat grain into flour. The mill was bought from inside Afghanistan for Afs. 60,000. It worked for 3 to 4 days in almost every village in the district. The rent for working of the mill was one seer of wheat for every 20 seers of wheat. Some of the spare parts of the mill needs to be replaced because they have got worn out. The demand for the spare parts have been put forward. The threshers have been used for cleaning of wheat got from about 400 jeribs of land.

Ten tons of improved wheat seed and a set amount of fertilizer was distributed among the farmers on contract bases. They will return ten seers of wheat per one jerib of land to VITA. The new wheat seed has been cultivated the results of which will be seen in later spring. 300 bags of fertilizer which consisted of 200 bags of Urea and 100 bags of DAP were sold at the set price of Urea Afs. 1200 per bag and DAP Afs. 1500 per bag. The farmers were very excited about the fertilizer and were ready to buy it from VITA because it was offered for a very reasonable price. The fertilizer brought from Russia was available at quite an expensive price which is Afs. 3500 per bag of DAP and Afs. 2500 per bag of Urea.

The rural works activity undertaken is in progress also. About 187 karezes have reached completion while 180 are still under construction. Three dusty roads have been surveyed and reported to the VITA head office. About 60 projects consisting of irrigation works like jui, canals and flumes are also surveyed and reported to the head office.

Prices of some of the agricultural and other commodities are as follows:

COMMODITY	UNIT	PRICE IN AFS.
Wheat	7 kg	700
Corn	"	450
Rice	"	2000
Sugar	"	2200
Ghee/Oil	16 kg	9000
potatoes	7 kg	400
Onions	"	300
Beans	1 kg	250
Petrol	1 gal.	2000
Deisel	"	800
Kerosene	"	800

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## VITA

### Agriculture Rehabilitation Project Goshta District of Nangarhar.

#### 1. General Features:

Goshta is one of ten districts (Woleswali) of Nangarhar province. It is located in the north-eastern part of the province, surrounded by Kunar province, Iyalpoor and Kama districts of Nangarhar and NWFP of Pakistan. Goshta is surrounded by average size mountains in the west, north, east and Kunar river in the south. Its estimated elevation from sea level is 600 m. In summer, its weather is hot and dry and in winter it is mild but sometimes the temperature drops to below zero. It was under the rule of Kabul regime until 1988. It was liberated after great sacrifices by its people and Mujahideen.

#### 1.1. Population

Goshta has a population of 40,000 people. According to the information gathered by VITA surveyers, recently, 11,000 persons are men, 13,500 women, and the rest are children under age 17. It is estimated that around 30 percent of the population have taken refuge in Pakistan around 40 percent were forced to go to Moman Darah and Mama Khil, 3-5 Km from the district. The men from these two places, occasionally travel to the district to look after their farms and property. The population of Goshta is very homogenous in the sense that almost all of its people are Pushtoon, speaking the same language, Pashto.

The main Pushtoon tribes in Goshta are Khaja Zai and Mohmond. Mohmond, the largest in number is divided to sub-tribes such as Khoga Khil, Atmar, Musa khil, Eisa Khil and Mati Khil. Most persons between 18-40 of age are actively involved in Jihad, but those over 40 are engaged in farming.

#### Villages and Population before War:

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## 1.2. Social and Political Organization:

People of Goshta, like other Pushtoon tribes had a hierarchical social organizations and leadership. Maliks and Khans were superior in the society and they were asked to solve the conflicts between individuals and groups. In the old time, prior to the coup of 1978 and before Jihad movement started, even Khans and Maliks could solve big cases of conflicts such as murder, kidnapping and etc.

The eleven years of war against the occupation of Russians and communists rule brought changes and established a new social order and leadership. Commanders fighting in the field and Jihadic organizations gradually replaced the Khans and Maliks. Although the position of Khans and Maliks somewhat are weakened but still they and the elders of the villages become members of village Shora, established by the fronts to solve the disputes and conflicts in the society. Most of these village Shoras extend help and facilitate the implementation of the developmental programmes drawn up by the NGOs in Pakistan. At the same time, there is a field commanders Shora which plans, coordinates and evaluates the cooperation and joint operations among the parties in their area. At present there is a such Shora in Goshta, composed of HIA, JIA, NIFA, Ittehad and Harakat-e-Ingelab Islami.

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## 2. Agricultural activities:

Since Goshta has a mild climate in the winter, double cropping is possible. It is estimated that over 50 percents of cultivated land are double cropped every year. The occupation of the majority of people are farming.

### 2.1 Land Ownership:

Those having 1-15 jeribs of farm land, farm themselves and usually do not hire farm labors. Those having from 16 to 100 jeribs, they would hire labors in addition to his work and his family members. The number of hired labor is based on the amount of the farm. There are few people who have more than 100 jeribs. Most of these people are not in Goshta and the land is under the supervision of Mujahideen. Mujahideen give the land to a farmer to farm. Mujahideen will get 30-40 percent while the farmers get

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The total area of Goshta is 168 sq. km. The estimated arable land is 75,000 jeribs and the estimated cultivated area is 48,750 jeribs of which 29,250 jeribs are under irrigation and 14,625 jeribs are rainfed. About 26,250 jeribs are fallow and the rest 4,800 jeribs are range land.

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Agriculture machinery, like tractors, threshers, water pumps, sprayers are not available in the district. 50% of draft animals were destroyed in the war and there are only 150 oxen in the entire district. The oxen should be bought from Pakistani markets. The price of one ox is ranging from 50,000 to 100,000 Afs in Peshawar.

#### Area under crops - jerib

	<u>Irrigated</u>	<u>Rainfed</u>
Wheat	20,000	10,225
Rice	12,150	-
Corn	8,000	-
Fruits	100	-
Vegetables	4,000	-
Others	5,000	4,400

#### Changes in crop production during 11 years of war - Tons

	<u>1978</u>	<u>1989</u>
Wheat	9,800	3,620
Rice	6,304	2,100
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Vegetable	5,000	1,000
Fruits	140	80
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#### 2.5. Sources of Irrigation Water:

The main sources of irrigation is the river of Kunar and rain. Irrigation water is provided from the Kunar river by a diversion dam. The canal that takes the water to the farming area is 15 km long and 4 m wide. Water is available all year long which enables the farmers to have double crops in one year. Other sources such as wells, deep wells and karezes are not present. The intake of the canal is not concreted and every year in the time of water rise the intake is damaged and the farmers suffer from the shortage of water for sometimes.

### 3. War Damage in the District:

Afghanistan, under the communist rule, has experienced great devastation in all aspects of its social and economic life in the last 11 years. Goshta district was not an exception. Burning of its orchards by bombardment estimated over 20%, destruction of farm structure 20%, destruction of irrigation systems and networks 30%, growth of weeds and shrubs due to abandonment of farm land 50% and presence of mine 10%.

#### 3.1 Percentage of Damage in the District:

Roads	80%
Schools	100%
Hospitals	100%
Storage facilities	100%
Other public utilities	20%
Orchards	30%
Irrigation systems	30%
Other agricultural infrastructures	50%
Forest trees	25%
Oxen and other animals	50%

### 4. Conclusion:

The background information and the profile on Goshta district show that more than 90% of its population is engaged in agriculture and most of the farmers are small farmers. As other areas of Afghanistan, the district has been damaged socially and economically during the war. Lack of security, the intensity of war and the miscalculated policy of the puppet regime of Kabul caused severe devastation in all aspects of social and economic life of the district.

Farmers and the rural population were hit very badly. The stoppage of movement of farm facilities and agriculture production inputs to rural areas left the farmers of the district without help and this resulted in severe agricultural production decrease. In order to rehabilitate the agriculture of the district, it is imperative to plan and implement an agricultural development project in the district.

### 5. The Project:

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encourage the people to move to their farms and district.

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In order to assure sufficient water for irrigation, VITA can concrete the intake of the canal or reinforce it with gabions and other solid materials.

5.4. 8. Agricultural Credit:

In the absence of an organized system of agricultural credit, local money lenders who would charge exorbitant interest rates, are present in the area and reap the income of the farmers. To enable the farmers to become free from the money lenders domination, VITA will devise a system of agricultural credit to enable the farmers to obtain farm inputs and facilities without going to the local money lenders.

VOLUNTEERS IN TECHNICAL ASSISTANCE

VITA

VITA'S KAMA/GOSHTA REHABILITATION PROJECT

PREPARED  
13 MARCH, 1990

**1. Name of Project:**

Poppy Eradication

**2. Background:**

Goshta is one of the districts of Nangarhar province. Its cultivated area is estimated to be 49000 jeribs of land, out of which 29500 jeribs are irrigated and 14500 jeribs rainfed. Farming is the main occupation of the people. More than 90% of the grown-up males are engaged in agriculture and animal raising. Land holding is small and it makes it necessary that the farmers look for other sources of income.

According to the information gathered recently by VITA personnel, Goshta had a population of 40,000. It is estimated that around 30% of people were forced to take refuge in Pakistan and around 40% in the neighbouring areas of Momand Dara and Mama Khei, 3-5 km from the district.

Goshta was under the control of the Kabul government until 1988. Ten years of war severely damaged agriculture infrastructure and disrupted farming occupation. Roads, canals were destroyed and the flow of agriculture inputs were cut off. Most of the people were forced to leave their homes and land and go to other areas. In 1988, Goshta was liberated and it is now under the control of mujahideen. In the last two years after the liberation some sporadic repatriation took place.

Poppy has been grown in Goshta since a long time, but during the war, in the absence of a controlling body it expanded. Although poppy growing area was shrunk after the liberation of the area but still in some places it is grown. If effective measures are not taken now, it may expand again.

**3. Objectives:**

- a. To rehabilitate intakes, streams, canals, roads and bridges.
- b. To enable the farmers to increase their production, through providing them with enough production inputs and facilities and farm power.
- c. To find a substitute crop to replace poppy growing.

d. To convince the poppy growers that growing poppy is against religion, health and ethics.

The four objectives mentioned above are inter-related and are parts of a broader goal of enabling the farmers to increase their production and income in order to stop cultivation of poppy.

**4. Agricultural Rehabilitation Scheme (ARS):**

In order to implement and monitor a poppy eradication plan efficiently, a well equipped ARS is needed to be established in Goshat. The ARS should be staffed with well qualified and experienced persons. The ARS should launch a coordinated and integrated approach. Irrigation and transportation systems, enough and timely production inputs, farm power, agriculturals and agriculture extension services are essential to farmers for increasing production and marketing their crops. In rehabilitating and reconstruction roads, bridges, canals and intakes, the ARS should employ the local manpower, which will enable them to earn some money. In the reconstruction process, the "food for work" programme could be used.

**5. Local Participation:**

In establishing an ARS in Goshta for rehabilitation of the district, planning for eradication of poppy and implementation of the plan, the local people and the local leaders must be consulted and their support must be sought. It is necessary to encourage local participation in every stage of the programme.

It should be made clear to the people of the district that those who cooperate with the ARS in eradication of the poppy and demonstrate willingness to participate in rehabilitation activities can be covered by the ARS.

The local leaders and commanders should commit themselves to the elimination of opium poppy production within their command areas. They should also cooperate with the ARS to prevent the extension of opium cultivation in non-producing areas. This could be materialized through discussions, encouragement and signing contracts with these leaders. Once the commanders accepted the idea and commit themselves to the cause, only then they can conduct their enforcement in their areas. It is believed that an enforcement programme without providing alternate means of

subsistence to the farmer is not likely to succeed. It is therefore imperative to begin some rehabilitation and developmental activities, such as building roads, bridges, canals, intakes and crop substitution. In undertaking these activities the level of local employment will be raised and those who are presently involved in producing opium will be attracted to grow something else.

Since poppy is a high value crop, the farmers may not give it up easily, the ARS should employ moral means too to combat its cultivation. The ARS should work very closely with the local shura, commanders, village elders and local religious leaders. They, especially the religious leaders in their preaching in Friday prayers (Jammah) could inform the growers, traders and traffickers of poppy about the evils and hazards of poppy and its derivatives to human society. They should inform the general public that growing, trading and using poppy is immoral, unlawful, non-religious and unhealthy practice.

#### 6. The Activities Of Goshta ARS:

##### a) Survey of the Area

Conducts a thorough survey of the damages incurred during the war on canals, streams, intakes, roads, bridges, forests, orchards, agricultural land, animals and offer recommendations for rehabilitation. Based on the economical importance of the above items, the ARS proposes the rehabilitation programme on priority bases.

##### b) Statistics and Data

The ARS keeps upto date statistical data of the acreage of land under poppy cultivation and present potential growers of poppy as well as other beneficiaries of the ARS. The statistical data is renewed at the time of every planting season to see and evaluate the effect of the poppy eradication programme.

Prepares a complete list of all the crops grown in the area including their acreage, types of the crop, orchards, forests and type and number of animals.

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c) Planning

Based on the urgency of needs of the area, the ARS proposes long and short term implementation plans.

d) Need Assessment

The ARS evaluates and assess the needs of the farmers in regard to agricultural production inputs, which are stated as follows:

1. IMPROVED SEED

Since the seed grown in Goshta is degenerated and does not produce satisfactorily, VITA is going to replace it with Pak-81 or Pirsabak-85, both are high yielding wheat varieties for low altitudes.

2. CHEMICAL FERTILIZERS

High yielding (improved seeds) varieties give satisfactory results in the presence of sufficient water and chemical fertilizers. So VITA will provide the farmers with Urea and DAP (50 kg of Urea per jerib and 25 kg of DAP per jerib). All the fertilizers will be transported from Pakistan or partly provided from inside.

3. AGRI-CHEMICALS

The required chemicals should be provided to fight insects and diseases.

4. FARM POWER

50% of the oxen were destroyed in the war. VITA may replace them or it will provide the farmers with tractors and the necessary equipments.

5. THRESHERS

In order to enable the farmers to collect their harvest soon and clean the land for the second crop, VITA will provide some threshers to farmers.

6. FARM LABOUR

About 70% of the population took refuge in Pakistan or moved to other areas inside Nangarhar province. Some took active part in jihad which caused severe shortage of farm labour. In

implementing this project we may encourage the people to move to their farms and districts.

#### 7. ORCHARDS

The orchards and fruit trees are damaged and in most cases they are dried up. VITA should take steps to re-establish them. It is believed that peaches can do well and can compete with poppy.

#### 8. IRRIGATION

In order to assure sufficient water for irrigation, VITA can concrete the intake of canal, or reinforce it with gabions and other solid materials. VITA also can clean and rehabilitate the three existing canals.

#### 9. AGRICULTURAL CREDIT

In the absence of an organized system of agricultural credit, local money lenders who would charge exorbitant interest rates, are present in the area and reap the income of farmers. To enable the farmers to become free from the money lenders domination, VITA will devise a system of agricultural credit to enable the farmers to obtain farm inputs and facilities without going to the local money lenders.

10. The ARS studies the possibilities of growing licorice, saffron and other high value plants.

11. The ARS attempts to establish extension service, maintain close contacts with farmers and try to respond to their requests and ideas.

NOTE\* The terms and conditions of providing the farmers with the inputs and services should be worked out after negotiations with the beneficiaries, local shura and the commanders.

#### 7. Reporting and Monitoring:

The head of the ARS reports to the Chief of Party VITA stationed in Peshawar and is responsible for management of the ARS. Every month, the head of the ARS prepares a progress report to reflect the achievements. The report is bought by a senior staff of the ARS to Peshawar. While in Peshawar, he will be interviewed by the monitoring section for more information.

Every month a monitor from Peshawar visits the ARS and provides timely verification of the progress of ARS activities. He submits a written report in which, he discusses the achievements and identify problems encountered the ARS and recommend solutions, He too, is interviewed after every trip he makes to the area.

### 8. Staffing:

The ARS should be staffed by qualified and experienced persons, preferably from the area. They should know and consider local customs, traditions and social values while dealing with local people. Since poppy cultivation is a sensitive matter they have to act with care.

A tentative organization and budget of the ARS in Goshta is proposed as follows:

A. <u>Personnel Designation</u>	<u>No.</u>	<u>Monthly Salary (Rs)</u>	<u>Yearly Salary (Rs)</u>
<b>Technical Assistant</b>			
1. Area Development Officer	1	5,889	70,669
2. Administrator	1	2,673	32,076
3. Store Keeper	1	1,050	12,600
4. Senior Tech (Eng.)	1	4,725	56,700
5. Junior Tech (Eng.)	1	3,588	43,056
6. Trainee Tech (Eng.)	1	2,673	32,076
7. Senior Tech (Agr.)	1	4,725	56,700
8. Junior Tech (Agr.)	1	2,673	32,076
9. Junior Tech (Agr.)	1	2,673	32,076
10. Tractor Operator	1	2,529	30,348
11. Assistant Operator	1	2,455	29,460
12. Office Helper	1	1,050	12,600
<b>Logestic Support</b>			
B. Office Facilities (furnishing)			50,000
Rent (building, store)			
<b>Program</b>			
D. Farm Implements:			
1. Tractors	1	150,000	150,000
2. Plow	1	10,000	10,000
3. Blades	1	4,000	4,000

4. Trailer	1	30,000	30,000
5. Reapers	1	4,000	4,000
6. Cultivators	1	5,000	5,000
7. Threshers	3	30,000	30,000
E. Motor. Bike	3	30,000	90,000
F. Oxen	40	12,000	480,000
G. Wheat (seed)	10 tons		40,000
H. Urea	20 tons		20,000
I. DAP	10 tons		15,000
J. Sprayers	5	2,000	10,000
			<hr/> 868,000
K. Agriculture Infrastructure + A.A. (income generating project)			<hr/> 769,000
			<hr/> 2,150,000
		Total	

After the ARS starts functioning and completes the proposed survey the organization, staff, budget and the needs of the area could be reorganized.

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