OUTLINE OF VISIT TO HELMAND REGION BY:

ENG. SAYED JAWED OF HELPING AFGHAN FARMERS ORGANIZATION

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DATES: 17 MARCH TO 23 MARCH 1997.

17 MARCH: ARRIVED LASHKARGAH. VISITED SITE OF DAMAGED LASHKAR GAH BRIDGE AND POTENTIAL WASH OUT AREA BETWEEN BRIDGE AND INTAKE FOR RUSSIAN BUILT "LITTLE SHAMALAN" CANAL. VISITED SITE OF SHAMALAN CANAL WASH OUT (IN PROGRESS) NEAR SHAMALAN WASTEWAY #1, BASHARAN. VISITED SITE OF MCI REPAIR WORK ON PREVIOUS SHAMALAN CANAL WASH OUT.

18 MARCH: VISITED HOU CHAH-E-ANJIR WORKSHOPS. DISCUSSIONS AND TOUR WITH SITE MECHANIC WHO ALSO HAS JOB IN LASHKAR GAH. VISITED SITE OF BOGHRA CANAL SYPHON ON LOY MANDA WASH. SYPHON STRUCTURE EXPOSED BY WASH OUT, UNDER FLOOD. TRAPPED BY FLOOD WATERS IN CHAH-E-ANGIR. HOUSED BY AND LONG DISCUSSIONS WITH LOCAL NOTABLE FARMER, TRACTOR OWNER AND RELIGIOUS LEADER.

19 MARCH: VISITED NAD-I-ALI REGION, BOGHRA CANAL AND MANY DITCHES AND DRAINS. DISCUSSIONS WITH LOCAL NOTABLES, FARMERS, INCLUDING OPIUM POPPY FARMER, AND PAST MEMBER OF NATIONAL ASSEMBLY. MANY NEWLY SETTLED AREAS OUTSIDE NAD-I-ALI AREA. WOULD HAVE BEEN CLASSED AS OUT OF PROJECT AREAS BEFORE THE WAR. WATERED BY BOGHRA CANAL WATER.

20 MARCH: MEETING WITH HAVA STAFF. PERMISSION FOR PHOTOGRAPHY FROM GOVERNOR. VISIT TO BOGHRA INTAKE STRUCTURE. VISIT TO FAILED RECHANNELING DIKES ON OPPOSITE SIDE OF RIVER. VISITED AN PHOTOGRAPHED MOST CONTROL STRUCTURES DOWN THE BOGHRA CANAL TO CHAH-E-ANJIR TURN OFF.ACCOMPANIED BY HCU ENGINEER.

- 21 MARCH: VISITED SITE OF JUNCTION OF S-10 LATERAL AND SHAMALAN CANAL. SHAMALAN CANAL NOT IN USE BETWEEN THIS JUNCTION AND JUNCTION OF "NEW SHAMALAN" AND OLD SHAMALAN CANALS NEAR AYNAK SINCE EARLY IN THE WAR. VISITED SITE OF JUNCTION OF THESE TWO CANALS. RE-VISITED SITE OF DAMAGED LASHKAR GAH BRIDGE AND "NEW SHAMALAN" INTAKE.
- 22 MARCH: MEETING WITH HAVA STAFF AND DELEGATION OF REPRESENTATIVES FROM NAD-I-ALI AND MARJA. TOURED ENGINEERING OFFICE AND ARCHIVES AT HAVA. TOUR OF COTTON GIN, MET STAFF AND GATHERED INFORMATION. VISITED BOGHRA CANAL AT MARJA. MANY NEWLY SETTLED AREAS OUTSIDE MARJA WHICH WOULD HAVE BEEN CLASSED AS OUT OF PROJECT AREAS BEFORE THE WAR. APPARENTLY WATERED BY BOTH BOGHRA CANAL WATER AND DRAIN WATER.

23 MARCH: RETURNED TO KANDAHAR.

OUTLINE PROPOSAL FOR AN INTEGRATED PROGRAM FOR THE REHABILITATION OF THE BOGHRA IRRIGATION SYSTEM AND THE ERADICATION OF OFIUM POPPY PRODUCTION IN THE CENTRAL REGION OF HELMAND.

THE PROBLEM:

THE AGRICULTURAL AREAS OF CENTRAL HELMAND HAVE TWO INTERRELATED PROBLEMS:

- 1. THE INCREASING PRODUCTION LEVELS OF OPIUM POPPY.
- 2. THE INCREASING DETERIORATION OF THE BOGHRA IRRIGATION SYSTEM THAT HAS SEEN NO SERIOUS OR SYSTEMATIC MAINTENANCE SINCE 1980.

MOST OF THE STRUCTURES AND GATES ON THIS SYSTEM HAVE BEEN DAMAGED WHICH HAS RESTRICTED THE WATER FLOW FOR YEARS CAUSING VERY HIGH LEVELS OF SILTING THAT WOULD NOT HAVE OCCURRED IF THE CONTROL STRUCTURES FUNCTIONED.

THE HELMAND RIVER HAS CHANGED COURSE ON SEVERAL OCCASIONS SINCE THE WAR CAUSING PROBLEMS AT THE INTAKE OF THE BOGHRA CANAL REDUCING FLOW INTO THE SYSTEM. BADLY ENGINEERED RESPONSES TO THIS PROBLEM FAILED ON AT LEAST THREE OCCASIONS.

THE DRAINAGE SYSTEM WHICH HAS ALWAYS BEEN A PROBLEM IN THIS REGION, HAS SILTED UP AND FILLED WITH VEGETATION RESTRICTING THE OUTFLOW. THE FARMERS HAVE CONSTRUCTED MANY NEW ON FARM DRAINS AND HAVE MAINTAINED MANY OF THE OLDER ON-FARM DRAINS BUT THE MAJOR AND SECONDARY DRAINS HAVE GENERALLY BEEN IGNORED. THIS CAUSES A BACK UP OF DRAIN WATER IN THE FARM AREAS.

BECAUSE OF THE RESTRICTED FLOW OF WATER THROUGH THE SYSTEM, THE REGION IS WATER SHORT DURING THE HOT SEASON WHEN THE HELMAND RIVER FLOW IS LIMITED. ACCORDING TO FARMERS IN THE AREA, HAVA OFFICIALS AND COTTON GIN PERSONNEL, THIS HAS RESULTED IN STUNTED CROPS AND LOWER PRODUCTION DURING THE SECOND-CROP SEASON PLANTED IN LATE SFRING OR EARLY SUMMER.

FOR EXAMPLE, THE COTTON GIN EXPECTED A BUMPER CROP OF COTTON THIS YEAR BUT REALIZED A REDUCTION FROM LAST YEARS PRODUCTION. 1995 PRODUCTION WAS APPROXIMATELY 4,800 M. TONS. 1996 PRODUCTION WAS APPROXIMATELY 3,800 M. TONS.

ECONOMICALLY, THE SECOND-CROP SEASON IS IMPORTANT, NORMALLY PRODUCING CORN, MUNG BEAN, COTTON AMONG OTHER CROPS. BEFORE THE WAR, COTTON WAS BECOMING THE MAJOR CASH CROP FOR THE REGION RESULTING IN THE BRITISH CONSTRUCTION THE SECOND COTTON GIN IN THE GIRISHK AREA. PRESENTLY OPIUM POPPY IS THE CASH CROP GROWN DURING THE FIRST CROPPING SEASON WHEN WATER IS ADEQUATE.

THIS PATTERN WAS INDEPENDENTLY DESCRIBED TO US BY FARMERS, HAVA AND COTTON GIN PERSONNEL. THE PRIORITIES TO BE ADDRESSED WERE:

- 1. BOGHRA CANAL INTAKE/RECHANNELING STRUCTURES FOR THE HELMAND RIVER.
- 2. BOGHRA CANAL CLEANING AND MAINTENANCE.
- 3. DRAIN CLEANING AND MAINTENANCE.

BUT AS ONE HAVA IRRIGATION ENGINEER POINTED OUT, ADDITIONAL WATER SHOULD NOT BE INTRODUCED INTO THE SYSTEM UNTIL THE CONTROL STRUCTURES HAVE BEEN PUT IN WORKING ORDER. ADDITIONAL WATER INTRODUCED INTO THE SYSTEM UNDER PRESENT CONDITIONS, FOR EXAMPLE BY FLOOD, COULD BLOW OUT THE SYSTEM.

DRAINAGE IS ALSO A MAJOR HOT SEASON PROBLEM WHEN EVAPORATION IS AT MAXIMUM. THE FLOW OF DRAIN WATER SHOULD BE OUT OF THE SYSTEM. IF IT STANDS, EVAPORATION WILL DRAW SALTS TO THE SURFACE HINDERING PLANT LIFE.

THE LEVEL OF ENGINEERING SKILLS REQUIRED TO EFFECTIVELY ADDRESS THE BOGHRA CANAL INTAKE/RE-CHANNELING PROBLEMS CANNOT BE OVER-EMPHASIZED. GIVEN THE NUMBER OF FAILED STRUCTURES/DIKES CONSTRUCTED SINCE THE WAR SCATTERED OVER THE REGION AND AT THE INTAKE, THE PRESENT LEVEL OF INVOLVED ENGINEERING SKILLS IS IN QUESTION. THE SKILLS NEEDED FOR RIVER RE-CHANNELING, RIVER BANK EROSION CONTROL AND INTAKE STURCTURE REPAIR SHOULD APPROXIMATE THOSE OF THE ORIGINAL BUILDERS OF THE SYSTEM. THIS SORT OF WORK COMMONLY INVOLVES A TEAM OF SKILLED CIVIL ENGINEERS. FOR EXAMPLE, THERE ARE ENGINEERS WITH SPECIALITIES IN RIVER RE-CHANNELING AND CONTROL. FAILED STRUCTURES REPRESENT WASTED DEVELOPMENT FUNDS.

STRATEGY:

- 1. FOCUS START UP ACTIONS FOR IMPACT.
- A. FOCUS ON REGIONS WATERED BY THE BOGHRA CANAL: NAD-I-ALI, MARJA, SHAMALAN AND ADJACENT AREAS.

THESE AREAS HAVE LIVING KNOWLEDGE OF PAST AGREEMENTS WITH THE U.S. THAT NARCOTICS ARE NOT TO BE GROWN IN AREAS WATERED BY U.S. FUNDED SYSTEMS. THESE AREAS ARE NOT TRADITIONALLY OPIUM POPPY GROWING REGIONS.

WITH LIMITED FUNDING, IT WOULD APPEAR USEFUL TO FOCUS FIRST ON REGIONS WHERE OPIUM IS NOT A TRADITIONAL CROP AND WHERE THERE WERE RESTRICTIONS IN THE PAST ON SUCH PRODUCTION, THAT IS, TO FOCUS ON AREAS WHERE THE CHANCES FOR SUCCESS ARE THE GREATEST.

IN DISCUSSIONS, THE FARMERS FROM NAD-I-ALI AND MARJA AND THEIR SPOKESMEN INDICATED THAT OPIUM WAS AN IMMORAL CROP AND THAT THEY WOULD STOP GROWING IF THEY HAD AN ADEQUATE IRRIGATION SYSTEM.

B. FOCUS ON MAINTENANCE OF SYSTEM STRUCTURES, GATES AND DRAINS DURING HOT SEASON AND BOGHRA CLEANING AND MAINTENANCE IN THE COLD SEASON, BEGINNING MID-DECEMBER, WHEN THE SYSTEM CAN BE SHUT DOWN.

AGAIN, SKILLED, EXPERIENCED CIVIL ENGINEERS ARE REQUIRED TO INSURE EFFECTIVE REHABILITATION OF THE STRUCTURES, GATES AND THE OVER-ALL SYSTEM...NOT A PATCH-UP JOB BUT SOMETHING PERMANENT.

C. FOCUS ON CONTINUING DIALOGUE WITH FARMERS ON THE NEED TO END OPIUM POPPY PRODUCTION AS INDIVIDUALS AND AS FORMAL AND INFORMAL GROUPS, IE. SHURAS, WATER CONTROL GROUPS, MULLAHS, INFLUENTIAL PEOPLE.

THE HEAD OF HAVA, A TALIBAN, INDICATED THAT ENFORCEMENT MEASURES IS AN ISSUE BETWEEN THE GOVERNMENTS INVOLVED BUT THAT PROBLEMS ARE SOLVED LOCALLY THROUGH DIALOGUE BETWEEN HAVA AND THE FARMERS. HE SAID THAT OPIUM POPPY CULTIVATION COULD BE ELIMINATED WITH AN IMPROVED WATER SYSTEM AND SUCH DIALOGUE. FARMER REPRESENTATIVES INDICATED THAT THEY WOULD GUARANTEE POPPY WOULD NOT BE A CROP IF THEY HAD A FUNCTIONING IRRIGATION SYSTEM.

- D. FOCUS ON CONTINUING FARMER INVOLVEMENT IN PARTICIPATION IN COSTS FOR IRRIGATION SYSTEM REHABILITATION AS THEY HAVE OVER THE PAST TWO YEARS. FARMER REPRESENTATIVES INDICATED THAT THEY WOULD BE WILLING TO CONTINUE THIS SUPPORT. THEY PROVIDED APPROXIMATELY \$10,000 FOR A GRAVEL DIKE THAT FAILED IN A RE-CHANNELING EFFORT ON THE HELMAND RIVER NEAR THE BOGHRA INTAKE. WORK PROVIDED BY A HAVA BULLDOZER.
- E. FOCUS ON WORK-FOR-WAGES FOR HAND LABOR ON THE REHABILITATION WORK WHERE POSSIBLE. PAY AT LEAST THE WAGE LEVEL BEING PAID FOR OPIUM POPPY FIELD LABOR, APPROXIMATELY 60 RS. PER DAY.
- AT EVERY OPPORTUNITY, FOCUS ON COMPETING WITH OPIUM POPPY AS A CROP. KEEP THE LABOR FORCE BUSY WITH: AN ADDITIONAL SOURCE OF INCOME. IF FOOD FOR WORK WERE POSSIBLE, THE ADDITIONAL WHEAT ON THE MARKET WOULD PERHAPS REDUCE WHEAT PRICES...A PLUS AND A MINUS. WE MIGHT ASSUME THAT AT PRESENT WHEAT IS PRIMARILY A CONSUMPTION CROP.
- 2. FOCUS ON COTTON AS THE CASH CROP FOR THE REGION. THE FARMERS KNOW AND UNDERSTAND THIS CROP. THE INFRA-STRUCTURE FOR PROCESSING THE COTTON IS PRESENT AND FUNCTIONING... THE COTTON GIN(S). THERE IS A READY MARKET FOR ALL PRODUCTION. THE COTTON GIN BY-PRODUCTS ARE CONSUMED LOCALLY... COOKING OIL, SOAP, SEED CAKE.
- AS WITH THE FOCUS ON THE REGIONS WHERE THE POTENTIAL FOR SUCCESS IS GREATEST, THE FOCUS ON CROPS LIKE COTTON WITH THE GREATEST POTENTIAL TO REPLACE OPIUM POPPY AS A CASH CROP IS THE LOGICAL STEP. THERE ARE OTHER TRADITIONAL CASH CROPS IN THE REGION KNOWN TO THE FARMERS WITH A READY MARKET THAT COULD ALSO BE SUPPORTED, EG. PEANUTS, WHICH WAS NOTED BY SEVERAL FARMERS. AGAIN, ADEQUATE WATER AND DRAINAGE IS REQUIRED.

GET THE COTTON GIN BACK IN THE FERTILIZER FOR CREDIT BUSINESS, TO BE REPAID AT THE END OF THE SEASON. IF NECESSARY, PROVIDE SUBSIDIES AND INCENTIVES, EG. SLIGHT REDUCTION IN FERTILIZER COSTS, PROVIDE FARMERS WITH BY-PRODUCTS OF THEIR PRODUCTION, SLIGHT REWARD FOR FARMERS WHO PRODUCE A TON OR MORE OF COTTON TO GIN. MOST OF THIS WAS DONE BEFORE THE WAR.

GREATLY INCREASED COTTON PRODUCTION, HOWEVER, DEPENDS ON ADEQUATE WATER DURING HOT SEASON AND GOOD DRAINAGE. PRESENTLY, MOST OF THE COTTON IS BROADCAST PLANTED AS OPPOSED TO ROW PLANTING. BROADCAST PLANTING REQUIRES LESS WATER. ROW PLANTING PRODUCES MORE COTTON.

AGAIN, FOCUS ON COTTON IN COMPETITION WITH POPPY. FARMERS PREFER COTTON.

SUPPORT THE REHABILITATION OF THE COTTON GIN(S). THE BRITISH BUILT BOTH FACILITIES. PERHAPS THEY- COULD BE INVOLVED IN THEIR REHABILITATION. THE LASHKAR GAH GIN IS FUNCTIONING BUT UNDER REDUCED PRODUCTION. SOME OF THE PREVIOUSLY MECHANICAL ACTIVITIES IN THE GIN ARE PRESENTLY BEING DONE BY HAND. SOME SPARE PARTS ARE BEING BROUGHT IN FROM PAKISTAN. BRITISH EQUIPMENT IS TO BE FOUND IN BOTH COUNTRIES. BUT TECHNICAL AID IS NEEDED ALONG WITH SPARE PARTS FOR THE REHABILITATION NECESSARY TO BRING THE PLANT BACK INTO FULL PRODUCTION. AGAIN, SKILLED MECHANICS/ENGINEERS FAMILIAR WITH THE EQUIPMENT ARE NEEDED IN SUPPORT OF THE PRESENT LOCAL STAFF.

3. FOCUS ON THE COORDINATION OF THE ORGANIZATIONS PRESENTLY FUNCTIONING IN THE REGION. THERE APPEARS TO BE LITTLE COORDINATION AND COMMUNICATION BETWEEN THE GROUPS...NGO'S, HAVA, HACU. THE RESULT IS THAT BITS AND PIECES ARE BEING ACCOMPLISHED IN THE REGION BUT WITH OUT AN APPARENT OVER ALL GOAL OR STRATEGY. PART OF THE PROBLEM MAY BE THE SCATTERED SYSTEM FOR FUNDING. PART OF THE PROBLEM MAY BE THE COMPETITION AMONG THE GROUPS FOR AVAILABLE FUNDING. THE NGO'S CANNOT ACCOMPLISH THE NECESSARY ACTIONS TO GET THE SYSTEM BACK IN OPERATION BUT THEY CAN HELP. HAVA CANNOT ACCOMPLISH THE NECESSARY ACTIONS EITHER BUT A COMBINED, COORDINATED EFFORT OF ALL THE GROUPS COULD BEGIN SUCH AN ACTIVITY. AS NOTED, MUCH OF THE PLANNING, DESIGN WORK AND CLOSE FIELD SUPERVISION REQUIRES ADDITIONAL EXPERIENCED ENGINEERING PERSONNEL, AMONG OTHER THINGS.

AN OVER ALL FOCUSED PLAN AND STRATEGY FOR SYSTEMS REHABILITATION IS REQUIRED AND IT SHOULD BE ORGANIZED UNDER HAVA. THE GOVERNMENT MUST BE BROUGHT BACK INTO THE SYSTEMS MAINTENANCE AND CONTROL ACTIVITIES AS THE MAJOR PLAYER. A REQUIREMENT FOR ALL MAJOR IRRIGATION SYSTEMS.

THE FARMERS, THEIR ORGANIZATIONS AND THEIR REPRESENTATIVES MUST ALSO BE MAJOR PLAYERS IN THIS COORDINATED EFFORT. THEY SHOULD BE THE MAJOR BENEFICIARIES AND THEY MUST BE KEPT INVOLVED IN THE PROCESSES AT EVERY STAGE. THEY WILL BE THE ONES WHO WILL STOP GROWING THE OPIUM POPPY.

4. FOCUS ON BRINGING HAVA AND HCU BACK AS KEY PLAYERS IN THE PROPOSED PLAN. BOTH ORGANIZATIONS STILL HAVE SOME PERSONNEL ON THE ROLLS BUT MOST HAVE OTHER JOBS AND ACTIVITIES. SALARY LEVELS ARE ONLY SYMBOLIC AT THE PRESENT TIME. SALARIES FOR REQUIRED PERSONNEL SHOULD BE SUPPLEMENTED. REQUIRED NEW PERSONNEL SHOULD BE RECRUITED AND TRAINED. THE REMAINING STAFF IS MOSTLY AGING. THE REHABILITATION OF THE BOGHRA IRRIGATION SYSTEM IS FOR THE PRESENT AND THE FUTURE. IT WILL NO DOUBT TAKE TIME. THE STAFF OF THE ORGANIZATION THAT RUNS AND WILL RUN IT MUST BE DEVELOPED ALONG WITH THE IRRIGATION SYSTEM.

SUPPORT FOR THE REHABILITATION OF THE HCU SHOP IS NEEDED. SINCE MUCH OF THE REQUIRED REHABILITATION WORK ON THE IRRIGATION SYSTEM WILL BE ACCOMPLISHED WITH THE AGING OR AGED HEAVY EQUIPMENT OF HAVA/HCU, MANY BREAKDOWNS AND REPAIRS SHOULD BE EXPECTED. THE BASICS FOR LUB/MAINTENANCE AND REPAIR SHOULD BE ESTABLISHED OR REESTABLISHED WITH HCU. SPARE PARTS ARE NEEDED. A START MUST BE MADE.

PRESENTLY HAVA/HCU HAVE 3 DRAGLINES, 2 BULLDOZERS, ONE GRADER AND 2 DUMP TRUCKS MORE OR LESS IN WORKING ORDER. OTHER EQUIPMENT IS IN PROCESS OF BEING BROUGHT BACK INTO OPERATION. WITH HELP, ADDITIONAL EQUIPMENT COULD LIKELY BE REHABILITATED. APPARENTLY 12 U.S. DRAGLINE ENGINES REMAIN IN PAKISTANI CUSTOMS IN KARACHI...PART OF A SHIPMENT DELAYED BY THE START OF THE WAR. THE STORAGE CHARGES MUST BE HIGH. THE QUESTION REMAINS AS TO HOW TO GET THIS EQUIPMENT TO THE ORIGINAL TARGET, HAVA/HCU?

PERHAPS OTHER DONORS COULD CONTRIBUTE TO THE EQUIPMENT UPGRADE. THE TWO BULLDOZERS ARE JAPANESE. TWO OF THE DRAGLINES ARE RUSSIAN. QUALITY U.S. EQUIPMENT REMAINS IN THE HCU EQUIPMENT YARD NEEDING SPARE PARTS AND REPAIR. THE STOREHOUSE FOR THE CATAPILLER EQUIPMENT SPARE PARTS WAS DESTROYED DURING THE WAR OR AFTER.

IN SUMMARY: THE PROGRAM PROPOSED IS ONE OF FOCUS, START UP, CLOSE COORDINATION OF POTENTIAL IMPLEMENTING AGENCIES, DONOR SUPPORT FOR DIFFERENT ELEMENTS, UP GRADING AND DEVELOPMENT OF AFGHAN GOVERNMENT ORGANIZATIONS THAT WILL EVENTUALLY AGAIN CONTROL THE IRRIGATION SYSTEMS, AND CLOSE INVOLVEMENT AT EVERY STAGE OF THE LOCAL FARMERS AND THEIR REPRESENTATIVES WHO WILL USE THE IRRIGATION SYSTEM AND STOP GROWING POPPIES: WITH SUCH A FOCUS, LIMITED FUNDS CAN BE CHANNELLED TO THE IRRIGATION SYSTEM'S PRIORITIES FOR A MAJOR IMPACT ON THE REHABILITATION OF THE IRRIGATION SYSTEM AND IN THE REDUCTION OF OPIUM POPPY PRODUCTION. THIS WOULD BE A LOGICAL START.