

A.I.D. EVALUATION SUMMARY PART I

(MORE FILLING OUT THIS FORM, READ THE ATTACHED INSTRUCTIONS) P D-ABE-299

A. REPORTING A.I.D. UNIT:
USAID/Pakistan
 (Mission or AID/W Office)
 (ES# 91-3)

B. WAS EVALUATION SCHEDULED IN CURRENT FY ANNUAL EVALUATION PLAN?
 yes skipped ad hoc
 Eval. Plan Submission Date: FY Q

C. EVALUATION TIMING 77302
 Interim final ex post other

D. ACTIVITY OR ACTIVITIES EVALUATED (List the following information for project(s) or program(s) evaluated; if not applicable, list title and date of the evaluation report)

Project #	Project/Program Title (or title & date of evaluation report)	First PROAG or equivalent (FY)	Most recent PACD (mo/yr)	Planned LOP Cost ('000)	Amount Obligated to Date ('000)
391-0485	Northwest Frontier Area Development Project	FY 1983	8/93	63,000	54,911

IDENTIFICATION DATA

F1

E. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

1. ERADICATION OF POPPY PRODUCTION Action(s) Required

a) The government must continue its enforcement program in the area, while simultaneously pursuing local and area development projects.

Name of officer responsible for Action	Date Action to be Completed
Secretary, P&D GONWFP	On-going

2. DEVELOPING AND DIVERSIFYING THE AREA ECONOMY

2.1 Provision of Infrastructure

a) No new sub-projects should be undertaken in view of the large number of sub-projects in the pipeline which will use most of the project's infrastructure development funds. At any rate, Pressler Amendment precludes new infrastructure.

ARehman, GONWFP JHasan, O/Eng SMalik, O/ARD	December, 1990
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b) The project should assist beneficiaries to develop maintenance systems and procedures for small infrastructure facilities (water supply systems,

-do- June, 1992

(See continuation sheets Page 7-11)

(Attach extra sheet if necessary)

ACTIONS

F. DATE OF MISSION OR AID/W OFFICE REVIEW OF EVALUATION: no 12 day 2 yr 1991

G. APPROVALS OF EVALUATION SUMMARY AND ACTION DECISIONS:

Project/Program Officer
 Signature [Signature]
 Typed Name Sohail Malik
 Date: 1-16-92

Representative of Borrower/Grantee
[Signature]
 Aizaz-Ur-Rehman
 Project Director
 Gadsden
 Date: Jan 20, 92

Evaluation Officer
[Signature]
 Tanvir A. Khan
 Date: 1-23-92

Mission or AID/W Office Director
[Signature]
 James A. Norris
 Date: 1/27/92

APPROVALS

H. EVALUATION ABSTRACT (do not exceed the space provided)

The Northwest Frontier Area Development Project (NWFADP) represents the first USAID narcotics-related development intervention in Pakistan. This approach includes infrastructure, agriculture, education, vocational training, and health facilities in support of government-imposed bans on poppy production. Implementing agencies include the Project Coordination Unit (PCU) in Topi and Mansehra and various line agencies such as WAPDA and provincial departments of Agriculture and Communications and Works (C&W). The midstream evaluation was conducted by Development Economic Group of Louis Berger International during July/August, 1990. The evaluation was conducted on the basis of a review of project documents (including the first interim evaluation report), visits to all seven Union Councils, 22 villages, and approximately 90 sub-projects. The major findings and conclusions are:

- A combination of enforcement and development within a unique framework of cooperation between GOP and USAID has been necessary and successful in eliminating poppy production.
- The task of opening up the project area to development has been accomplished.
- Crop subsidies, orchard and forest payments, and infrastructure development involving little or no community participation, have become a liability rather than an asset that have created a dangerous welfare syndrome that undermines rather than builds sustainability and self-reliance.

It is, therefore, strongly recommended that the project should continue and accelerate the process of systematic phase-out of subsidies and major infrastructure development, consistent with completing the 600 approved sub-projects, in order to break the cycle of dependency before it becomes entrenched. Also, initiate a parallel but independent process of grassroots, self-reliant development built around sustainable village organizations that provide for broad-based community participation.

The evaluators noted the following "lessons":

1. A social development component built around a village level organization scheme with more direct recipient involvement should be included from project inception./
2. the phase-out of subsidies should begin early, particularly if a social organization team is in place to facilitate the development of self-help activities.
3. The level of subsidies provided in this project should not be as high in future endeavors.

ABSTRACT

I. EVALUATION COSTS

1. Evaluation Team

Name	Affiliation	Contract Number OR TDY Person Days	Contract Cost OR TDY Cost (US\$)	Source of Funds
Malcolm J. Odell, Team Leader				
Walter Firestone, Agronomy, Forestry		PCD-0085-1-00-	\$140,732	PIO/T 391-0485-3-60335 and 00012
Yar Mohmmad Khan, Agri., Forestry		9060-00,		
G. Lamar R overt, Ph. D, Area Develop.		D/O No:09		
Paul Couniotakis, Engineering				
R. Rhey Palmer, Ph. D, Trng.				

2. Mission/Office Professional Staff Person-Days (estimate) 42

3. Borrower/Grantee Professional Staff Person-Days (estimate) 56

COSTS

A.I.D. EVALUATION SUMMARY PART II

J. SUMMARY OF EVALUATION FINDINGS, CONCLUSIONS AND RECOMMENDATIONS (Try not to exceed the 3 pages provided)

Address the following items:

F12

- Purpose of activity(ies) evaluated
- Purpose of evaluation and Methodology used
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned

Mission or Office: USAID Mission to Pakistan Date this summary prepared: October 1991
 Title and Date of Full Evaluation Report: Opium Poppy Eradication: Development, Dependency, and Self-Reliance October, 1991

EXECUTIVE SUMMARY

Purpose of Project

The NWFAD Project began in 1983 in the Gadoon-Amazai area of the North West Frontier Province of Pakistan. The NWFAD Project purposes were to eradicate opium poppy production and to develop and diversify the area's economy. Two approaches were used: (1) The GOP enforcing criminal penalties and destruction of poppy crops while (2) concurrently initiating development sub-projects with support from USAID.

Methodology of Evaluation

To review the mid-term stage of Phase II activities in agriculture, infrastructure, and institutional development, field visits were made by the evaluation team members, operating in three small groups, to all seven Union Councils, 22 villages and approximately 90 sub-projects. All main metalled and shingled roads were covered and two parts of Baitgalli UC were crossed by foot. Two boat trips on Tarbela Lake/Indus River provided exposure to portions of Kala Dhaka. Including visits to two villages and visual inspection of five others. Additional field visits were made to five other rural development projects in NWFP for comparative purposes.

Meetings were held with PCU/USAID staff, approximately 100 villages leaders and farmers; GOP officials including Planning and Development, the Special Development Unit for poppy eradication programs; Local Government, Agriculture, Forestry, Irrigation, Communication & Works, and Public Health Engineering Departments; District Administration, Agriculture University, WAPDA, Industrial Estate; and Kala Dhaka staff. Project reports, correspondence, and other relevant documents were reviewed.

At the conclusion of the evaluation a facilitated workshop was held with important GOP and USAID officials. The participants verified the teams's findings, clarified conclusions, reviewed recommendations, defined realistic implications, and identified future steps.

The evaluation served us well by focusing heavily on project phase out and post PACD sustainability. These considerations have assumed even greater importance with the implementation of the Pressler Amendment.

SUMMARY

Findings

The findings of this evaluation were:

1. Poppy production has been virtually eliminated in the project area.
2. A remote tribal hill area has been brought into the mainstream of Pakistan's national economy.
3. Since 1986 the project has completed about 400 and begun another 600 sub-projects. These include:
 - a. 74 miles of roads;
 - b. 153 schools;
 - c. 9 health facilities;
 - d. 16 veterinary dispensaries;
 - e. 40 electrified villages;
 - f. 300+ irrigation systems;
 - g. 163 potable water supplies;
 - h. 50% increase in agricultural production due to high yielding crop varieties and fertilizer;
 - i. 2,000+ local residents trained in technical trades;
 - j. 3,000+ local residents placed in new jobs; and
 - k. Rs. 400,000,000+ moved through the local economy because of subsidies, cash payments, and employment generation.

Conclusions

The conclusions drawn from these findings are:

1. A combination of enforcement and development--within a unique framework of cooperation between GOP and USAID--has been necessary and successful in eliminating poppy production.
2. The task of opening up the project area to development has been accomplished.
3. Crop subsidies, orchard and forest payment, and infrastructure development involving little or no community participation, have become a liability rather than an asset that have created a dangerous welfare syndrome that undermines rather than builds sustainability and self-reliance.

Against these conclusions, however, arise two others that pose a dilemma as phase-out proceeds:

4. The sustainability of most development activities, including the maintenance and operation of many facilities, is in jeopardy due to weak linkages with key line agencies and lack of active community participation at the beneficiary level.
5. Even with the completion of the 600 sub-projects now in the pipeline, many of which have benefitted relatively few people, the Gadoon-Amazai area will still lag behind the adjacent Swabi lowlands in terms of basic infrastructure and social services.

Recommendations

Based on these conclusions, the following recommendations are made:

1. Continue and accelerate the process of systematic phase-out of subsidies and major infrastructure development, consistent with completing the 600 approved sub-projects, in order to break the cycle of dependency before it becomes entrenched.
 - a. Reduce project and USAID Technical Assistance staff;
 - b. Approve no new sub-projects under current guidelines;
 - c. Solve cash flow blockages between AID and Kala Dhaka insuring future flow through PACD; and
 - d. Phase out subsidies and similar stipend payments.
2. Initiate a parallel but independent process of grassroots, self-reliant development built around sustainable village organizations that provide for broad-based community participation, including:
 - a. Support involvement of recipients, GOP and USAID in design and implementation of grass-roots, self-reliant development initiatives in the project area;
 - b. Complete the identification, development, and strengthening of village development organizations (VDOs);
 - c. Provide staff training, methods, and resources to VDOs;
 - d. Develop integrated extension teams;
 - e. Support sub-projects that include substantial self-help contributions;
 - f. Expand technical assistance for self-help sub-projects;
 - g. Develop and implement maintenance program;
 - h. Strengthen agriculture and social forestry activities;
 - i. Combine training and job placement operations and activities; and
 - j. Within the beneficiary participation/village-organization activity, support access to credit and/or village savings programs for both men and women.

Lessons Learned

With the caveat that retrospective prescriptions are presumptuous for such a high-risk but successful project, three hypotheses merit testing in comparable future endeavors.

1. A social development component built around a village level organization scheme with more direct recipient involvement should be included from project inception.
2. the phase-out of subsidies should begin early, particularly if a social organization team is in place to facilitate the development of self-help activities.
3. The level of subsidies provided in this project should not be as high in future endeavors.

K. ATTACHMENTS (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier)

1. Complete Evaluation Report.

L. COMMENTS BY MISSION, AID/W OFFICE AND BORROWER/GRANTEE

The evaluation was relatively complete and within the terms of the Scope of work. It was informative and answered issues presented in the Scope. It provided the Mission with various options for leaving behind useful units of development after the LOP.

At the conclusion of the evaluation process a facilitated workshop was conducted with all significant officials of both the GOP and USAID. The participants verified the Team's findings, clarified conclusions, reviewed recommendations, defined realistic implications, and identified future steps.

The recommendations of the Evaluation Team which were not accepted, are given below alongwith the reasons for their non-acceptance.

Recommendation/Action

1. Developing and Diversifying the Area Economy
 - (a) "Monitoring of sub-projects should include setting start and completion target dates for small (community) sub-projects, and establishing implementation schedules for large ones (roads, electrification)."

Not acceptable: Setting of start and finish dates for all infrastructure sub-projects has always been a part of the approval process.

- (b) "The project should conduct a study of the area's surface and groundwater resources and update/expand the report on groundwater resources prepared by WAPDA in 1988. This should be done in view of the large number of wells completed, under construction and planned, and the Industrial Estate's large and expanding water needs. Based on this information, future strategy for development of water resources should be defined."

Not acceptable: Since the project will not be undertaking any more infrastructure sub-projects, it would not be appropriate to carry out a groundwater budgeting study at this stage, especially after the Pressler being in effect.

(See continuation sheets Page 12-14)

ATTACHMENTS

MISSION COMMENTS ON FULL REPORT

ACTIONS

E.Action Decisions Approved By Mission or AID/W Offi. Director	Name of Officer Responsible for Action	Date Action to be Completed
Action(s) Required		
<p>irrigation channels, dug wells, buildings). This could involve setting up village groups (such as water user associations or village development organizations) responsible for maintenance; training community members on maintenance and repairs; and assisting communities to establish small community funds to cover maintenance costs and purchase tools and small stocks of materials and spare parts. These village groups would also be encouraged to plan, and implement future small development projects.</p>	<p>AREhman, GONWFP JHasan, O/Eng SMalik, O/ARD</p>	<p>June, 1992</p>
<p>2.2 Agriculture</p>		
<p>2.2.1 Extension</p>		
<p>a) Proper extension facilities for Field Assistants should be completed in each Union Council to include an office, storage space and a farmer meeting hall.</p>	<p>AREhman, GONWFP SMalik, O/ARD UMohammad, O/ARD</p>	<p>December, 1992</p>
<p>b) Integration of agricultural department staff with other line agencies should be improved through periodic joint meetings and combined field implementation efforts. The use of integrated extension teams under the direction of a social organizer should be explored.</p>	<p>-do-</p>	<p>On-going/ December, 1992</p>
<p>c) University agriculture students should be used for survey and other field work both to augment extension staff capability and to provide students with practical field experience. Linkages with TIPAN should be strengthened in all areas including crops, fruit, irrigation, forestry and livestock.</p>	<p>-do-</p>	<p>-do-</p>
<p>2.2.2 Forestry</p>		
<p>a) The present approach to afforestation should not be replicated in other areas since it has achieved only low survival rates. Instead a social forestry program should be supported within the Gadoon-Amazai area along the lines of the Malakand Social Forestry Project, and preferably utilizing a social organization approach.</p>	<p>-do-</p>	<p>June, 1992</p>

ACTIONS

E.Action Decisions Approved By Mission or AID/W Offi. Director	Name of Officer Responsible for Action	Date Action to be Completed
Action(s) Required		
<p>2.2.3 Orchards</p> <p>a) Farmers should continue to receive training by experienced horticultural extension service personnel on fruit tree cultivation, including soil preparation, planting, budding, fertilizing, spraying, harvesting and post-harvest handling of fruit. In addition, extension workers must suggest to farmers proper intercropping practices, including crop rotation and cropping management.</p>	<p>ARehman, GONWFP SMalik, O/ARD UMohammad, O/ARD</p>	<p>On-going</p>
<p>2.2.4 Model Farms</p> <p>a) The use of model farms and demonstration plots should be continued. Owners of model farms need to be trained in maintaining proper records for extension and research purposes. Likewise, farms owners need to be trained in how to maintain the records needed for comparison and for providing feedback to extension agents and agricultural researchers.</p> <p>b) The model farm and demonstration plot program should be strengthened by training farmers in the latest farm and crop husbandry techniques for growing cash crops, fruit orchards, oilseed crops and vegetables.</p>	<p>-do-</p> <p>-do-</p>	<p>December, 1992</p> <p>-do-</p>
<p>2.2.5 Subsidies</p> <p>a) Phase out wheat subsidies, fertilizer subsidies, orchard and forest protection payments, and make work jobs.</p> <p>Recipients should be clearly and expeditiously informed of all scheduled phase-out plans. Once the plans are announced, under no circumstances should they be modified.</p>	<p>MSArbab, GONWFP ARehman, GONWFP SMalik, O/ARD</p> <p>-do-</p>	<p>March, 1993</p> <p>December, 1991</p>
<p>2.3 Human Resources Development</p> <p>a) Training and job placement operations need to be combined under the direction of a professional manpower development specialist within the PCU. These functions might productively be transferred to the Sarhad Development Authority which oversees the Industrial Estate and this option should be carefully examined.</p>	<p>MSArbab, GONWFP ARehman, GONWFP SMalik, O/ARD UMohammad, O/ARD</p>	<p>December, 1991</p>

ACTIONS

E.Action Decisions Approved By Mission or AID/W Offi. Director	Name of Officer Responsible for Action	Date Action to be Completed
Action(s) Required		
b) The feasibility of completing construction of a training facility on a self-help basis in the northern part of the project area should be examined.	ARehman, GONWFP SMalik, O/ARD UMohammad, O/ARD	June, 1992
c) Comprehensive work plans for job placement should be prepared and implemented. They should provide for outplacement services for PCU staff affected by the phase-out.	ARehman, GONWFP SMalik, O/ARD UMohammad, O/ARD	On-going
d) Special procedures for granting permission for overseas employment to area residents should be sought, if necessary, at high levels of governments.	-do-	June, 1992
e) The quality of all training programs and the employment status of all training graduates should be monitored. This information and other data related to training and employment should be computerized to facilitate ongoing monitoring and evaluation.	-do-	On-going
2.4 Non-Formal Education (NFE) and Women		
a) Support for NFE activities, should include additional girls' schools and adult literacy programs. However, the NFE program should not be pressured to meet specific outreach goals: the rate of expansion of project activities should be based solely on the willingness of village groups to accept the programs.	-do-	-do-
b) The possibility of using vacant veterinary clinic buildings as NFE centers should be investigated. Means of improving/repairing the existing rented facilities should be reviewed.	-do-	June, 1992
c) The NFE program should include women with technical experience in health and nutrition to help improve the health and well-being of area residents.	-do-	June, 1992
d) The NFE program should include additional staff women with technical expertise in agriculture. Among the activities such persons could help undertake are: (1) Train local women to operate nurseries producing seedlings for sale in the local area. (2) Help establish kitchen gardens.	-do-	On-going
e) Teachers should be provided with sufficient training before being posted to the project area and should receive periodic in-service training.	-do-	On-going

ACTIONS

E.Action Decisions Approved By Mission or AID/W Offi. Director	Name of Officer Responsible for Action	Date Action to be Completed
Action(s) Required		
f) Monitoring and supervision of teachers in the field should ideally be increased to a monthly basis.	-do-	June, 1992
g) Safe accommodation at the Topi office should be provided for women teachers so that they can meet with each other and supervisory staff and receive in-service training on a monthly basis.	AREhman, GONWFP SMalik, O/ARD UMohammad, O/ARD	June, 1992
h) Opportunities should be provided for periodic meetings, workshops, etc., between Gadoon-Amazai NFE staff and workers from other regions, especially IRDP/Mardan.	-do-	June, 1992
2.5 Institutional Development & Beneficiary Participation		
2.5.1 Union Councils and Project Committees		
a) Common interest groups in villages should be organized to operate and maintain completed facilities effectively and to undertake future projects. These groups should have wide participation and would best be started with the help of qualified social/community organizers and extension agents operating under the PCU/controlling agency.	MSArbab, GONWFP AREhman, GONWFP SMalik, O/ARD UMohammad, O/ARD	June, 1992
2.5.2 NWFP Planning and Management Capability		
a) The PCU should continue its project management and implementation activities. As sub-projects are being completed, the technical staff should focus on assisting communities in establishing systems to sustain completed facilities. Redundant staff should start being phased out.	AREhman, GONWFP SMalik, O/ARD UMohammad, O/ARD	On-going
b) A review of project data collection and reporting requirements should be undertaken for each activity to ensure that the improved data management capacity of the project computer center is utilized effectively and efficiently. This effort should be repeated on an annual basis. PCU personnel should be trained to accomplish data analysis as an institution strengthening measure.	-do-	-do-
c) The PCU should increase coordination with line agencies to ensure that completed sub-projects start being operated and maintained in a timely manner.	AREhman, GONWFP	-do-

ACTIONS

E.Action Decisions Approved By Mission or AID/W Offi. Director	Name of Officer Responsible for Action	Date Action to be Completed
Action(s) Required		
<p>2.6 Private Sector Development</p>		
<p>a) Investigation of opportunities for improved credit availability for area residents should be completed.</p>	<p>ARehman, GONWFP SMalik, O/ARD UMohammad, O/ARD</p>	<p>June, 1992</p>
<p>2.7 Integrated Rural Development Approach</p>		
<p>a) Support integrated extension units which would be led by social organizers skilled in facilitating the development of village organizations, and would include or have access to agricultural, forestry, engineering, health, education and/or small business/private sector development expertise.</p>	<p>-do-</p>	<p>June, 1992</p>
<p>2.8 Other Development Projects</p>		
<p>a) Features of other area development projects should be considered for use in the reorientation of the Gadoon-Amazai, and the continuation of the Kala Dhaka project. Those for particular consideration include:</p>	<p>MSArbab, GONWFP ARehman, GONWFP SMalik, O/ARD</p>	<p>Already considered</p>
<p>a. IRDP/Mardan</p>		
<p>b. Kalam IRDP</p>		
<p>c. Malakand Social Forestry</p>		
<p>d. Sarhad Rural Support Corp</p>		
<p>e. Aga Khan Rural Support Program</p>		
<p>3. KALA DHAKA ASSISTANCE</p>		
<p>a) Experienced social organizers should be added to the Technical Assistance Team with provision for additional staff for the PCU, as required.</p>	<p>HAgHa, GONWFP SMalik, O/ARD DScott, TAT</p>	<p>December, 1991</p>
<p>b) Employ a no-subsidy/reduced-subsidy approach for activities aimed at curtailing the spread of poppy production in Kala Dhaka.</p>	<p>-do-</p>	<p>June, 1992</p>
<p>c) Continue the workshop methodology, and institute seminars and frequent staff meetings among Kala Dhaka and Gadoon-Amazai projects.</p>	<p>HAgHa, GONWFP SMalik, O/ARD DScott, TAT DGrube, C'dale</p>	<p>On-going</p>

2. Agriculture

- (a) "Cash crops like saffron, ginger, mushrooms, etc., should be introduced on a pilot basis and then expanded to other areas as appropriate".
- (b) "A baseline farm system, farm product and soil nutrient survey should be conducted to ensure that proper farming strategies are employed".
- (c) "A master integrated watershed management program should be established for the entire Gadoon Project area and properly implemented through the Forestry Department in a phased manner".
- (d) "A rangelands management program should be devised as part of a village-based integrated watershed management program to help improve quantity and quality of livestock produced".
- (e) "The introduction of controlled grazing (including fencing) in combination with planting of fodder grasses/trees should be considered. Under a social forestry program, one major component would be range management and forage production for animal feed, which would help alleviate the present shortages that exist in the project area".
- (f) "Production of specialty crops such as strawberries and specialty fruit trees should be tried on a limited scale with particularly interested farmers".
- (g) "The possibility of establishing fruit and vegetable processing facilities in the Gadoon Industrial Estate should also be investigated".

Not acceptable: The above are proposed new activities which cannot be initiated due to implementation of Pressler Amendment.

3. Human Resources Development

- (a) "Coordination between OPF, PCU and the Gadoon Industrial Estate should be improved. Overall responsibility for training and job placement (including monitoring) should be given to one agency and not divided as it is now."

Not acceptable: This has become redundant as the OPF contract has been terminated as of 30 June, 1991.

- (b) "PCU and USAID engineers should provide enhanced training to villagers involved in sub-project construction enabling them to become potential contractors for other sub-projects offered by the various GOP line agencies."

Not acceptable: Villagers involved in the construction of sub-projects in the project area received their training in the past from PCU and USAID engineers. They were guided in planning, executing and quality control of small construction projects.

4. NWFP Planning and Management Capability:

"The PCU should continue its project management and implementation activities. As sub-projects are being completed, the technical staff should focus on assisting communities in establishing systems to sustain completed facilities. Redundant staff should start being phased out. As design and planning activities are completed, USAID engineers should assist communities and line agencies to establish maintenance and repair systems to ensure the sustainability of completed infrastructure."

Not acceptable: As the staffing phase out program is being implemented, the nominal technical staff available either with PCU or USAID (Engineering) will not be able to divert its attention from the completion of sub-projects in the infrastructure area. There may be a possibility in other technical fields.

5. Kala Dhaka Assistance

(a) "Initial disbursement of funds for the project must be accelerated and a timely flow of funds throughout the life of the project ensured."

Not acceptable: Initial disbursement has already been made and a timely flow of funds ensured.

(b) "Once the project area becomes more accessible, the project office should be relocated within it to improve coordination with local residents, coordination of project work, and to reduce travel time to project staff to the area."

Not acceptable: The project would operate from Mansehra, however, field offices will be opened in different zones of the project area to effectively and efficiently implement the community participatory program.

6. Drug Abuse Prevention Resource Center (DAPRC)

(a) "The program must be allowed to maintain autonomy and flexibility to fight, through any and all conventional and unconventional means available, what may become Pakistan's number one social problem."

Not acceptable: The apparent concept is extremely ambiguous "autonomy and flexibility to fight, through any and all conventional and unconventional means available" is unclear, non technical and too open ended. Furthermore, the project does not believe that the US Government would or should recommend "unconventional means."

(b) "The chief objective of the program should be to plan for the inevitable future expansion. Specifically, provision should be made to have the same authority and autonomy now afforded the program director transferred to the various sub-units, as they grow in size and scope through a systematic decentralization program. The Director should play more of a motivational and less of a directive role in the future."

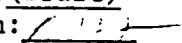
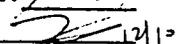
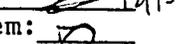
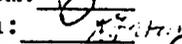
Not acceptable: Institutional strength is enhanced with appropriate and clear organizational structure and leadership. DAPRC has historically been weak due to a lack of clear and decisive administration from the Director. With a dynamic and management oriented Director administrating the DAPRC Unit, the organization as a whole will become viable and sustainable. The project does not believe decentralizing the sub units is a constructive goal.

(c) "This activity should be extended to the Gadoon-Amazai project area particularly in the Gadoon Industrial Estate, where there are many wage laborers, who are particularly susceptible to drug addiction."

Not acceptable: DAPRC activities should be closely linked to the Enforcement Schedule and all concurrent counter narcotic development schemes. The drug addict population in Pakistan is not limited to Gadoon Amazai area, and the focus has to be in major concentration areas.

(d) "DAPRC training of drug abuse trainers should be continued."

Not acceptable: The statement is extremely limited and offers no special insight. Orientation, direction and emphases should be clarified.

Clearance: RDD/ARD:JWTucker:(Draft)
RDD/ARD:FRPavich:(Draft)
ARD:AJRadi:(Draft)
PDM:MHauben: 
ENG:ZNoor:  12/10
O/FM:MSaleem: 
PRO:KFatima:  12/12/91
PRO:VDMiedema: 
DD:NMTumavick: 

XD-ABE-293-A
77703

**OPIUM POPPY ERADICATION:
DEVELOPMENT, DEPENDENCY, AND SELF RELIANCE**

**GOVERNMENT OF PAKISTAN
UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT**

**NORTH WEST FRONTIER
AREA DEVELOPMENT
PROJECT**

**EVALUATION
REPORT**

VOLUME I

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Team Leader, Institutional Analysis

G. Lamar Robert, Ph.D.
Area Development, Economics

Walter Firestone
Agronomy, Forestry

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October 1990

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**OPIUM POPPY ERADICATION:
DEVELOPMENT, DEPENDENCY, AND SELF RELIANCE**

**GOVERNMENT OF PAKISTAN
UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT**

**NORTH WEST FRONTIER
AREA DEVELOPMENT
PROJECT**

**EVALUATION
REPORT**

VOLUME I

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Acknowledgments

As our NWFADP evaluation team left Peshawar at the end of our visit, we found ourselves remarking to each other about the extraordinary support we had received from all parties concerned during the past month and a half. Whether in the villages where we were welcomed repeatedly with refreshment, food, and even beds for the night; at project headquarters in Topi where all doors and files were open to our every question; at the USAID offices in Peshawar and Islamabad where all manner of logistical support and documentation were made available; or throughout the government offices and rural development project locations throughout Northwest Frontier Province; we couldn't have asked for more cooperation. We know the sacrifices that so many individuals made and only hope that our work adequately reflects their substantive and supportive contributions.

From vehicles and drivers to a diesel launch to take us up the Indus into Kala Dhaka, the list grew of endless tasks, both small and large, that helped us gather the information we needed in order to understand this complex, controversial, and politically charged project. The result was that we were able to cover more ground, obtain more material, see more people and thus probe deeper than we otherwise would have been able to do.

Specifically, in Islamabad Pat Peterson, Frank Pavich, Ghaffar Mohmand, Christine Scheckler, and Mehdi Zaman each went the extra mile to make our time as productive as possible.

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Finally, in a collaborative international effort, and in spite of a change in both national and provincial governments in the middle of the mission, Azam Khan and Suleman Ghani of the Government of NWFP, joined by USAID officers from Peshawar to Islamabad saw that our work was never interrupted. We're especially grateful that they could move the administrative and bureaucratic machinery that permitted Yar Mohammad Khan, Director General of the Special Development Unit of NWFP, to join our team as special consultant on forestry, agriculture, and integrated area development.

The downside of all these contributions, of course, is that we have no one to blame but ourselves for any shortcomings of this evaluation, and we only hope it reflects well on all those who contributed so much to seeing it through.

Malcolm J. Odell, Jr
Peshawar
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List of Abbreviations and Acronyms

AID	Agency for International Development (U.S.)
AKRSP	Aga Khan Rural Support Program
C&W	Communications and Works Department
DAPRC	Drug Abuse Prevention Resource Center
DC	Deputy Commissioner
FAR	Fixed Amount Reimbursement
FATA	Federally Administered Tribal Area
GAADP	Gadoon-Amazai Area Development Project (former designation of the present NWFADP)
GONWFP	Government of North West Frontier Province
GOP	Government of Pakistan
HCC	Host Country Contracting
IRD	Integrated Rural Development
IRDP	Integrated Rural Development Project
KIDP	Kalam Integrated Development Project
LG&RD	Local Government and Rural Development Department
NFE	Non-formal Education
NGO	Non-governmental organization
NWFADP	North West Frontier Area Development Project
NWFP	North West Frontier Province
OPF	Overseas Pakistanis Foundation
P&D	Planning and Development Department, NWFP
PACD	Project Assistance Completion Date
PATA	Provincially Administered Tribal Area
PCU	Project Coordination Unit
PHED	Public Health Engineering Department, NWFP
PIL	Project Implementation Letter
PCC	Project Coordinating Committee
PRB	Project Review Board
PLA	Personal Ledger Account
PNCB	Pakistan Narcotics Control Board
PP	Project Paper
SDU	Special Development Unit, NWFP Planning and Development Department
SOW	Scope of Work
SRSC	Sarhad Rural Support Corporation
T/V	Training and Visit System (agriculture extension)
TA	Technical Assistance
TIPAN	Transformation and Integration of the Provincial Agricultural Network Project
UC	Union Council
UNDP	United Nations Development Program
UNFDAC	United Nations Fund for Drug Abuse Control
USAID	United States Agency for International Development
VDO	Village Development Organization
WAPDA	Water and Power Development Authority

EXECUTIVE SUMMARY

Purpose of Project

The NWFADP project began in 1983 in the Gadoon-Amazai area of the North West Frontier Province of Pakistan. The NWFADP project purposes were to eradicate opium poppy production and to develop and diversify the area's economy. Two approaches were used: (1) The GOP enforcing criminal penalties and destruction of poppy crops while (2) concurrently initiating development sub-projects with support from USAID.

Methodology of Evaluation

To review the mid-term stage of Phase II activities in agriculture, infrastructure, and institutional development, field visits were made by the evaluation team members, operating in three small groups, to all seven Union Councils, 22 villages, and approximately 90 sub-projects. All main metalled and shingled roads were covered and two parts of Baitgall UC were crossed by foot. Two boat trips on Tarbela Lake/Indus River provided exposure to portions of Kala Dhaka, including visits to two villages and visual inspection of five others. Additional field visits were made to five other rural development projects in NWFP for comparative purposes.

Meetings were held with PCU/USAID staff, approximately 100 village leaders and farmers; GOP officials including Planning and Development, the Special Development Unit for poppy eradication programs; Local Government, Agriculture, Forestry, Irrigation, Communication & Works, and Public Health Engineering Departments; District Administration, Agriculture University, WAPDA, Industrial Estate; and Kala Dhaka staff. Project reports, correspondence, and other relevant documents were reviewed.

At the conclusion of the evaluation a facilitated workshop was held with important GOP and USAID officials. The participants verified the team's findings, clarified conclusions, reviewed recommendations, defined realistic implications, and identified future steps.

Findings

The findings of this evaluation were:

1. Poppy production has been virtually eliminated in the project area.
2. A remote tribal hill area has been brought into the mainstream of Pakistan's national economy.
3. Since 1986 the project has completed about 400 and begun another 600 sub projects. These include:
 - a. 74 miles of roads;
 - b. 153 schools;
 - c. 9 health facilities;
 - d. 16 veterinary dispensaries;

- e. 40 electrified villages;
- f. 300+ irrigation systems;
- g. 163 potable water supplies;
- h. 50% increase in agricultural production due to high yielding crop varieties and fertilizer;
- i. 2,000+ local residents trained in technical trades;
- j. 3,000 local residents placed in new jobs; and
- k. Rs. 400,000,000+ moved through the local economy because of subsidies, cash payments, and employment generation.

Conclusions

The conclusions drawn from these findings are:

1. A combination of enforcement and development--within a unique framework of cooperation between GOP and USAID--has been necessary and successful in eliminating poppy production.
2. The task of opening up the project area to development has been accomplished.
3. Crop subsidies, orchard and forest payments, and infrastructure development involving little or no community participation, have become a liability rather than an asset that have created a dangerous welfare syndrome that undermines rather than builds sustainability and self-reliance.

Against these conclusions, however, arise two others that pose a dilemma as phase-out proceeds:

4. The sustainability of most development activities, including the maintenance and operation of many facilities, is in jeopardy due to weak linkages with key line agencies and lack of active community participation at the beneficiary level.
5. Even with the completion of the 600 sub-projects now in the pipeline, many of which have benefitted relatively few people, the Gadoon-Amazai area will still lag behind the adjacent Swabi lowlands in terms of basic infrastructure and social services.

Recommendations

Based on these conclusions, the following recommendations are made:

1. Continue and accelerate the process of systematic phase-out of subsidies and major infrastructure development, consistent with completing the 600 approved sub-projects, in order to break the cycle of dependency before it becomes entrenched.
 - a. Reduce project and USAID Technical Assistance staffs;

- b. Approve no new sub-projects under current guidelines;
 - c. Solve cash flow blockages between AID and Kala Dhaka insuring future flow through PACD; and
 - d. Phase out subsidies and protection payments.
2. Initiate a parallel but independent process of grassroots, self-reliant development built around sustainable village organizations that provide for broad-based community participation, including:
- a. Involve recipients, GOP, and USAID in design and implementation of grassroots, self-reliant development initiatives in the project area;
 - b. Identify, develop, and strengthen village development organizations (VDO's);
 - c. Provide staff training, methods, and resources to VDO's;
 - d. Develop integrated extension teams;
 - e. Approve sub-projects that include substantial self-help contributions;
 - f. Expand technical assistance for self-help sub-projects;
 - g. Develop and implement maintenance programs;
 - h. Strengthen agriculture and social forestry activities;
 - i. Combine training and job placement operations and activities; and
 - j. Provide access to credit and/or village savings programs for both men and women.

Lessons Learned

With the caveat that retrospective prescriptions are presumptuous for such a high-risk but successful project, three hypotheses merit testing in comparable future endeavors:

1. A social development component built around a village level organization scheme with more direct recipient involvement should be included from project inception.
2. The phase-out of subsidies should begin early, particularly if a social organization team is in place to facilitate the development of self-help activities.
3. The level of subsidies provided in this project should not be as high in future endeavors.

INTRODUCTION AND OVERVIEW OF THE REPORT'

A. Project Context

The North West Frontier Area Development Project is among the most unusual development programs in the Third World. From the outset it has appeared to have an almost impossible mission. Its overriding purpose is to help persuade independent tribal people to give up one of the world's most profitable cash crops--opium poppy--the raw material of the world's heroin supply. Seeking to induce people in a remote area largely outside government control to make that unpalatable decision, the joint GOP/USAID project held out the promise of development in a classic "carrot" and "stick" trade-off: the Government threatened criminal penalties and the destruction of poppy cultivation while the project held out a variety of inducements under the rubric of development for those who agreed to turn away from poppy.

Begun in 1983 in the Gadoon-Amazai area of Northwest Pakistan, the project covers an area of 215 square miles with a population of approximately 120,000². For the first two to three years the project had only limited success. Poppy flourished and tribesmen shunned the development inducements. Then in March 1986, the Government acted to implement the phased enforcement action over a large area under open opium cultivation. Violence ensued, at least 8 people died, and a parliamentary uproar almost toppled the government. At that point many thought the project was over. Having completed its contract, the USAID funded technical assistance team withdrew. The government of NWFP, with modest management and engineering support from USAID, took over direct project management in what many felt would be a token gesture.

Surprisingly, however, the project subsequently met with great success in achieving its objectives. Why? Government continued enforcement. Farmers began removing their poppy and coming forward to cooperate with development initiatives. A skeleton team evolved into a major engineering machine. A corner had been turned.

B. Summary of Findings and Conclusions

This evaluation has found that by the 1989/90 season:

1. Poppy production has been virtually eliminated in the project area.
2. A remote tribal hill area has been brought into the mainstream of Pakistan's national economy.

¹This section adapted from the discussion paper prepared for the August 26 Workshop. It describes the project context and provides the summary of findings, conclusions, recommendations, and options for the future. For details see Vol. I, pp. 11-38; Vol. II, p. 1-34.

²Maps, Vol. I, pp. 9, 10; Tables, Vol II., p. 54.

While only four years ago 8,000-10,000 acres of stony hillsides were planted in opium poppy, this year only 22 acres were planted--and the crop on those was destroyed by Government. Production in 1986/87 was 88,000 kg. Today that number is zero³.

On the development side, in less than four years the project has completed about 400 sub-projects and begun another 600. These have had a significant impact in diversifying the area economy:

- 74 miles of roads will open up hitherto inaccessible valleys--bringing in goods and services, and stimulating entrepreneurial activity;
- 153 schools and health facilities will bring both opportunity and healing;
- over 300 irrigation and 163 potable water supplies, plus the electrification of 27 villages, will improve agricultural productivity, sanitation, and quality of life⁴;
- new high yielding crop varieties and fertilizer have increased agricultural productivity by at least 50%⁵;
- over 2,000 local residents have been trained and almost 3,000 have been placed in new jobs⁶;
- a broad range of subsidies, cash payments, and employment generation activities for local residents has moved at least Rs. 400 million through the local economy, putting money in people's pockets just when they saw their most profitable income source destroyed.

The conclusions drawn from these findings are that:

1. A combination of enforcement and development--within a unique framework of cooperation between GOP and USAID--has been necessary and successful in eliminating poppy production,
2. The task of opening up the project area to development has been accomplished,
3. Crop subsidies, orchard, and forest payments, and infrastructure development requiring little or no community participation, have become a liability rather than an asset that have created a dangerous welfare syndrome that undermines rather than builds self-reliance and sustainability.

Against these conclusions, however, arise two others that pose a dilemma as phase-out proceeds:

³Vol. II, pp. 1, 2, 54.

⁴Vol. II, pp. 2-8, 9-17.

⁵Vol. II, pp. 9-17, 55-59.

⁶Vol. II, pp. 13-22.

5. The sustainability of most development activities, including the maintenance and operation of many facilities, is in jeopardy because of weak links with key line agencies and lack of active community participation, at the beneficiary level, and
6. Even with the completion of the 600 sub-projects now in the pipeline, many sub-projects have benefitted relatively few people. Furthermore, the Gadoon-Amazai area will still lag behind the adjacent Swabi lowlands in basic infrastructure and social services. Much of the difference is due to the more productive soils and easier access of the Swabi lowlands.

From a two-pronged success, the project now faces a two-pronged dilemma:

- a. Once the people have accepted a new way of making a living, how can uneconomic inducements, which were essential at the outset, be phased out without loss of the trust and support of farmers who have come to expect them? How can GOP and AID shift away from uneconomic crop subsidies and forest and orchard payment programs that undermine sustainability and self-reliance?
- b. How can local community participation be built in to ensure the sustainability, maintenance, and long-range economic utilization of infrastructure and innovations introduced on a heavily subsidized basis?

In essence, we must address a complex question: how can AID and GOP orchestrate a balanced withdrawal from a policy geared to softening the blow of enforcement and shift to one built around sustainable development rooted in broad-based community participation, particularly since in both the absolute level of services and distribution of benefits the project area will fall short of the mark when the phase-out is complete?

C. Summary of Recommendations⁷

In answer to this question, this evaluation recommends a two-part package solution:

1. Continue and accelerate the process of systematic phase-out, in order to break the vicious cycle of dependency before it becomes entrenched.
2. Initiate a parallel but independent process of grass-roots, self-reliant development built around sustainable village organizations that provide for broad-based community participation. A new effort to provide the support necessary to initiate this process is recommended.

Whatever the merits of making substantial changes in direction, there are dangers that will have to be addressed during the transition. Thus it is recommended that the transition

⁷For details, see Vol. I, pp. 11-38.

include an ongoing process of dialogue among GONWFP, USAID, NWFADP field personnel and local residents--all of whom have been responsible for the project's manifest successes, and who will be essential to a smooth transition, and play a vital role in shaping and implementing the future.

Some of the dangers to be addressed in that dialogue include:

- a. Losing the best and the brightest: Once the winds of change are in the air, the very people most important to the future will understandably seek and find new opportunities. Organizations often include both creators and survivors. Both the transition and the future will be jeopardized if the project loses the former and is left only with the latter.
- b. Completion, maintenance and sustainability: The engineering staff responsible for the project's most visible achievements are essential to a smooth transition. Just over one-third of the sub-projects have been completed--600 remain in process. Neither communities nor line agencies are equipped to maintain and operate these over the long-term. The energy dedicated to construction must now be channeled to setting up viable maintenance and hand-over systems.

D. The Package:

1. Planning for Phase-Out⁸

The Project Coordinating Unit (PCU) at present employs over 400 persons, many of whom are redundant, having been hired as part of the necessary efforts to soften the economic blow of poppy eradication. At least one-fourth of the project staff should be assisted during the current year to find employment elsewhere. An additional one-fourth should be phased out during the following year since the project will no longer be evaluating applications for new sub-projects. Many staff members could be re-absorbed by the line agencies from which they were seconded. Orderly plans for termination or hand-over of remaining functions and staff can be implemented during the last two years. The scaling down of USAID technical assistance can parallel that of the PCU. Cut-backs, however, must be handled so as to retain the leadership and creative talent needed to ensure the strengthening of agriculture, forestry, maintenance systems, and human resource development.

Infrastructure development has been impressive, the pipeline is virtually full and construction will continue to PACD. No new sub-projects should be added to that pipeline. Since no further evaluation and design for new sub-projects will be needed, plans for staff reductions can be made and implemented as soon as possible, consistent with completion of sub-projects and development of essential maintenance systems. Applications for new sub-projects should be accepted only from broadly constituted

⁸See pp. 10-29.

village groups that are ready to make substantial self-help contributions and should be handed over to the proposed village organization support entity discussed below. Negative environmental side-effects must be addressed.

Alternative support mechanisms, either through this project or a separate one, should be examined that will help to upgrade the limited capabilities of concerned line agencies, particularly C&W, and equip them to take over facilities and programs instituted by donors. If these agencies remain weak the sustainability of all development efforts will be undermined.

Agricultural and forestry efforts will continue to be carried out through the line departments with continuing technical assistance from the PCU and USAID. Department staff, however, must be strengthened. Staff and farmer training and additional transportation are needed to improve efficiency and should be provided through the project. Testing and introduction of innovations should continue in close collaboration with local farmers. A social forestry program modeled on successful initiatives elsewhere in NWFP should be started immediately. All agriculture and forestry support functions can be handed over to the proposed village organization support entity as soon as feasible.

Human resource training and job placement have fallen far short of both targets and local needs. Operations must be overhauled. These should be combined under unified professional leadership within the PCU, under the aegis of the Industrial Estate, or with an outside entity such as OPF. This must be done in order to improve performance and to ensure that there are effective linkages among them and the job world. A careful examination of all options for improving vocational/technical training substantially for Gadoon residents is required. Outplacement services should be instituted to support the phase-out of PCU staff.

Private sector development, while not a project purpose, has been stimulated by infrastructure development and the contracting of sub-projects to village groups. Further support is recommended, through expanding basic and technical education for men and women, facilitating community savings and access to credit, and supporting community-based infrastructure development on a self-help basis.

Integrated rural development, largely in form rather than substance to date, needs strengthening. This can be achieved through the establishment of integrated staff meetings and workshops and the utilization of integrated extension teams to work with communities to develop multi-sectoral solutions to local problems. These functions can begin now within the PCU and be transferred out at the appropriate time.

Kala Dhaka activities to forestall the spread of opium cultivation from Gadoon are still in their infancy and are facing serious problems with flow of funds that must be solved immediately. Cross-fertilization between Gadoon and Kala Dhaka programs through workshops and exchange of staff and support have been initiated, however, and it is recommended that this continue. Social organization staff should be provided. No subsidies like those in Gadoon should be initiated.

The Drug Abuse Prevention Resource Center in Islamabad, has only recently begun systematic operations. It is recommended that program autonomy and flexibility be carefully maintained, especially as the program expands. Links to the project area must be strengthened and training of trainers activities should be increased in order to accelerate the multiplication of knowledge, skills, and information needed to combat the dangerous and rising abuse of drugs in Pakistan.

The Gadoon Industrial Estate has provided relatively few jobs for local residents while raising questions about potentially negative employment, environmental, and social effects from its expansion. Further study of these and development of a remedial action plan is recommended.

Subsidies, including provision of wheat seed, fertilizer, orchard and forest protection payments, and redundant employment, have accomplished their objectives of building cooperation and introducing innovation. It is recommended that they be phased out.

2. Options for the Future: Building Support for Village Organization⁹

Complementary to this phase-out program a new initiative is needed to maintain the momentum of development that has been successfully started by the NWFADP and to break the dependency cycle. Such an effort should directly involve and benefit the low-income majority of the population at the village level. GOP and USAID have already begun looking at alternative models for achieving this objective and it is strongly recommended that this process be continued and accelerated. Needed are:

1. Village level organizations that mobilize and involve the entire community in self-reliant problem-solving, and provide a mechanism for identifying, coordinating, and effectively utilizing local and outside resources in the pursuit of sustainable development and income generation.
2. The methodology, staff, training, and resources to develop village level organizations and help provide them with ready access to available outside technical know-how, inputs, savings programs, and credit.

Fortunately, a variety of successful and internationally recognized organizational options, both governmental and non-governmental, are available for close examination and reality-testing. These are within Pakistan, and more specifically within NWFP. One of them even adjoins the project area, while the others are nearby. It is recommended that USAID and the government of NWFP make the necessary plans to reach a consensus with area residents on the model most appropriate for the Gadoon-Amazai area and begin to make the necessary arrangements as soon as feasible.

⁹See pp. 30-36.

E. Evaluation Purpose and Methodology¹⁰

The purpose of this study is to measure the effectiveness of the NWFADP in terms of meeting its goals and objectives, to evaluate the interventions of Phase I and the first half of Phase II of the Gadoon-Amazai component and provide recommendations for the remainder of Phase II, and to evaluate the start-up of the Kala Dhaka component and provide recommendations for its continuation.

To review activities on agriculture, infrastructure, and institutional development, field visits were made by the evaluation team members, together with PCU and USAID project staff, to all seven Union Councils, 22 villages, and approximately 90 sub-projects. All main metalled and shingled roads were covered and two parts of Baitgall UC were crossed by foot. Two boat trips on Tarbela Lake/Indus River provided exposure to portions of Kala Dhaka, including visits to two villages and visual inspection of five others.

Meetings were held with PCU/USAID staff, approximately 100 village leaders and farmers, officials of P&D, SDU, Local Government, Agriculture, Forestry, Irrigation, C&W, and Public Health Engineering Departments; as well as District Administration, Agriculture University, WAPDA, Industrial Estate, and Kala Dhaka PCU/TA staff. Project reports, correspondence, and other relevant documents were also reviewed.

At the suggestion of USAID and GOP, the scope of work was expanded to review other development projects in the NWFP which might serve as possible models for the project's reorientation. For this purpose field visits were made to Kalam Integrated Development Project, Malakand Social Forestry Project, PATA Groundwater Irrigation Project, Malakand Fruit & Vegetable Development Project, and the Pak-German Integrated Rural Development Programme Mardan. Discussions were also held with knowledgeable parties associated with the Aga Khan Rural Support Program and the Sarhad Rural Sector Support Corporation.

The preliminary findings, conclusions, and recommendations from the evaluation process were then presented in a one-day workshop in Peshawar attended by a cross-section of participants that included senior officers from the Government of NWFP and USAID. The results of this workshop, described in Annex I, were then taken into account in preparing the final report. The mission began on July 12, 1990 in Pakistan. The team spent approximately six weeks in Pakistan, largely in Peshawar and the project area. The team leader preceded the other team members by five days and, with the economist and workshop facilitator, spent an additional five days preparing the final field draft. Two weeks were spent finalizing the report in Washington.

¹⁰Vol. II, p. 51.

F. Report Introduction

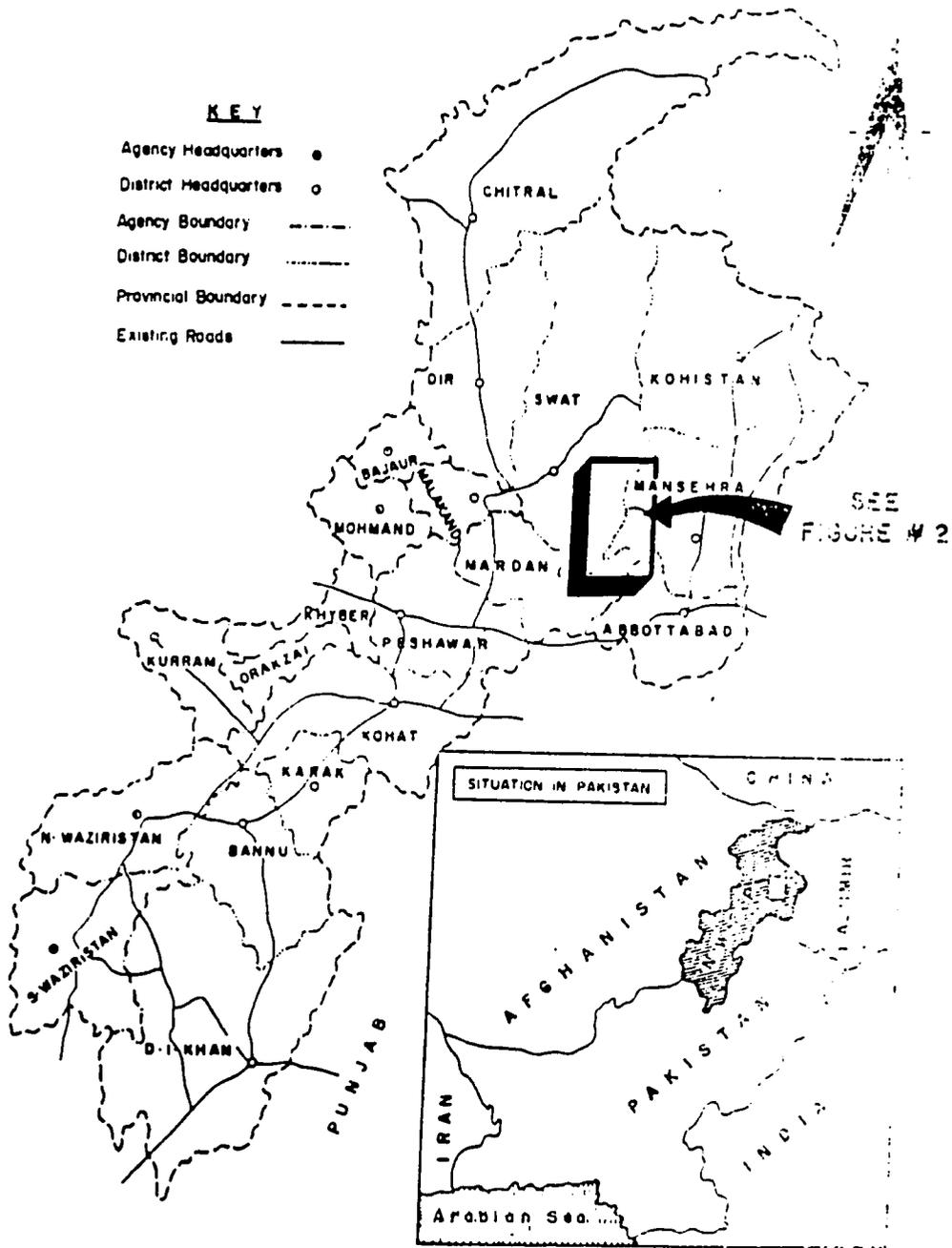
The second section of this volume presents conclusions based on findings and provides recommendations for the continuation, and eventual phase-out of this project. The third part discusses three options for the future to ensure sustainability of the project interventions and further development, including some of the strengths and weaknesses of each option.

The second volume of this report presents the evaluation team's detailed findings on the project's efforts to eradicate opium poppy production in Gadoon-Amazai and to develop and diversify the area's economy. The latter included provision of infrastructure, agricultural interventions, manpower development, non-formal education for women, institutional and private sector development, and an integrated rural development approach. This second volume also reviews the start-up activities of the Kala Dhaka component and the Drug Abuse Prevention Resource Center.

The second volume also includes the following annexes to the report: a report on the wrap-up workshop; evaluation scope of work; project log frames; further details on the evaluation methodology; data tables referred to and in support of the text; a collection of village focus group interviews; observational surveys conducted during reconnaissance tours; examples of potential social forestry and social organization models; list of persons contacted, including participants in the workshop; bibliography; and the AID Evaluation Summary 1330.

The outline for this report has been adapted from the Scope of Work (SOW) which appears in Vol. II, pp. 43-49. Cross referencing has been provided to indicate where each section of the SOW has been addressed in the report.

FIGURE 1 - LOCATION MAP



II

PLANNING FOR PHASE-OUT: CONCLUSIONS AND RECOMMENDATIONS

This section presents the evaluation team's conclusions and recommendations on the eradication of opium poppy production in Gadoon-Amazai, the development and diversification of the Gadoon-Amazai area economy, the start-up of project activities in Kala Dhaka, and the operation of the DAPRC. The recommendations reflect the requirements for a gradual phase-out of the project over the next three years and the need to sustain the project's achievements. Many of the recommendations outlined here would fit well within the community-based model outlined in Section III (pp. 28-33 of this volume).

A. Eradication of Poppy Production¹¹

CONCLUSIONS: Opium poppy has been virtually eliminated from the project area. No evidence of continued opium production has been uncovered by the team to date. There is no evidence of serious interest on the part of farmers in returning to an opium economy provided the government does not falter in its continued enforcement of the poppy ban and the current momentum of social, economic, and infrastructure development becomes sustainable.

RECOMMENDATIONS: The government must continue its enforcement program in the area, while simultaneously pursuing local and area development projects.

B. Developing and Diversifying the Area Economy

1. Provision of Infrastructure¹² **a. Core Infrastructure**

CONCLUSIONS: With completion of all on-going and approved sub-projects by the PACD, almost all of which appear to be feasible, most project paper targets will have been achieved or exceeded.

The design standards and construction quality appear to be satisfactory overall, except for: some irrigation weirs which appear to have been under-designed; some improperly sloped irrigation channels; some improperly constructed retaining walls at roadsides; lack of parapet walls; lack of side drains; lack of catch drains; and lack of proper stabilization of road embankments causing erosion of arable land.

¹¹Vol. II, pp. 1-2, 54.

¹²Vol. II, pp. 2-8, 82-83.

Completed road projects have not been maintained by the C&W, because of a shortage of funds and have been deteriorating. Completed electrical facilities appear to be in good condition. In the electrified villages, because of the high cost of connection the number of households requesting connections has been limited.

Almost all completed water supply and irrigation systems are operational. Maintenance of most water supply systems and of all irrigation channels and dug wells has been the responsibility of beneficiaries (communities or individuals). No maintenance procedures and systems appear to be in place. Some irrigation channels and water supply systems require immediate repairs.

Out of five tube wells, two have been transferred to the SDU. The others are to be operated and maintained by the Irrigation Department. This has not been done because of disagreements with beneficiaries over payment of water charges. Most completed school facilities are staffed and operational.

RECOMMENDATIONS: The approved sub-projects should be completed. The project should examine the feasibility of constructing bridal paths providing access to villages not served by roads, possibly by using free labor from benefitting communities, with technical and logistic support provided by the project. Few, if any, other new sub-projects should be undertaken in view of the large number of sub-projects in the pipeline which will use most of the project's infrastructure development funds.

Monitoring of sub-projects should include setting start and completion target dates for small (community) sub-projects, and establishing implementation schedules for large ones (roads, electrification).

Some design standards and construction methods should be upgraded: roads should be provided with parapet walls, as well as retaining walls and catch drains where necessary; construction of masonry walls and of irrigation weirs should be improved; flood protection structures in the lower part of the area should be provided; and the inner lining of yet to be constructed dug wells should be provided with more cross masonry columns to absorb physical shocks.

The project should conduct a study of the area's surface and groundwater resources and update/expand the report on groundwater resources prepared by WAPDA in 1988. This should be done in view of the large number of wells completed, under construction and planned, and the Industrial Estate's large and expanding water needs. Based on this information, future strategy for development of water resources should be defined.

The C&W should start maintaining the completed roads without further delay. Some completed road sections require repairs, provision of side and catch drains, construction of parapet walls, and stabilization of side cuts with vegetative cover or other means. The project should consider ways of assisting C&W in road maintenance, including providing some farm tractors with loader and backhoe attachments and small rollers. These should remain in the area after project completion.

Arrangements with communities along the roads to provide free labor for their maintenance should be explored. The project should assist beneficiaries to develop maintenance systems and procedures for small infrastructure facilities (water supply systems, irrigation channels, dug wells, buildings). This could involve setting up village groups (such as water user associations or village development organizations) responsible for maintenance; training community members on maintenance and repairs; and assisting communities to establish small community funds to cover maintenance costs and purchase tools and small stocks of materials and spare parts. These village groups would also be encouraged to plan, and implement future small upstream development projects.

Condition surveys for all completed facilities should be started immediately to determine maintenance or repair requirements, and systems for their maintenance established. For sub-projects under construction or planned, PCU should obtain the commitment of beneficiaries to maintain the sub-projects properly, and should begin setting up maintenance systems as soon as possible. In case of financially strapped communities or individuals, the project should consider paying all or some of the maintenance costs during the first year, gradually phasing out project contributions over the next three years. Hereafter, the proposed village groups would take over the maintenance duties.

b. Industrial Estate Infrastructure

CONCLUSIONS: The design standards and construction quality of the project-financed infrastructure in the Industrial Estate (covering an area of 195 acres) has been satisfactory.

The very rapid expansion of the Industrial Estate over an additional 1,300 acres does not seem to have been well-planned, and might have negative environmental effects and create social, housing, food and power supply, transportation, power supply and other problems.

RECOMMENDATIONS: The project should consider providing technical assistance to the SDU in undertaking (or completing) a study of the environmental impact and other effects of the current Industrial Estate's expansion. The study should examine industrial waste disposal (solid, liquid), air pollution, water supply, sewerage and other potential health hazards. It should also look at landscaping, housing, social and municipal standards, transportation, power supply and other aspects of development.

Based on the results of the study, SDU should take appropriate actions to safeguard against existing and potential environmental hazards. The SDU should undertake landscaping, and establishing green space by plantings on the adjoining hillocks.

2. Agriculture
a. Agricultural Development¹³

CONCLUSIONS: The project has been successful in changing the economy of Gadoon-Amazai from one based primarily on poppy cultivation to one with a diversified agricultural system. For example wheat production has increased 4-fold, maize has doubled, and oil seed has increased 6-fold. In addition provision of irrigation and other extension efforts has increased production of new cash crops, vegetables, and fruit. Agricultural sector ties with the national economy have increased (more shops are selling agricultural inputs), while most of the area crop and livestock production is consumed locally.

The project area was a net food importing region, before the project and continues to be a net importer. Due to project efforts, including the poppy ban, food production in the local area is higher than what it was prior to the project. In addition, provision of irrigation and other extension efforts has increased production of new cash crops, oil seed crops, vegetables and fruits. However, net agricultural incomes are and will continue to be below pre-project levels.

The project goal of assisting 10,000 farmers has been met and exceeded.

RECOMMENDATIONS: Project efforts to assist more area residents and to change the economy to one based on a diversified agricultural system should continue throughout the life of the project and selected activities should continue after PACD preferably under the village organization approach described in Section III (p. 28). Cash crops like saffron, ginger, mushrooms, etc., should be introduced on a pilot basis and then extended to other areas as appropriate.

A baseline farm system, farm product and soil nutrient survey should be conducted to ensure that proper farming strategies are employed.

b. Extension¹⁴

CONCLUSIONS: Agricultural extension was strengthened through the use of the Training and Visit (T/V) System (agriculture extension), though hiring additional staff and providing them with vehicles. However, staff still need additional training and vehicles, as well as proper office facilities.

Administrative procedures have hindered disbursement of funds in a timely manner.

The system for performance monitoring of extension activities is inadequate.

¹³Vol. II, pp. 9-11; 55-59; 82-83.

¹⁴Vol. II, pp. 11-12, 55-59, 82-83.

Special interest groups attempt to influence project decisions.

There is only limited integration of the work of the agricultural department of the project and that of other line agencies.

There has been very little interaction between the extension service of the project and provincial research facilities.

RECOMMENDATIONS: To enhance the extension service, the first priority is provision of additional transportation. This is followed by in-service training and short courses in extension work both in-country and abroad. [If additional staff can be provided, services to the area would be further improved.] The possibility of using vacant veterinary clinic structures as extension offices should be investigated.

Proper extension facilities for Field Assistants should be provided in each Union Council to include an office, storage space and a farmer meeting hall.

Integration of agricultural department staff with other line agencies should be improved through periodic joint meetings and combined field implementation efforts. The use of integrated extension teams under the direction of a social organizer should be explored.

Procedures for timely disbursement of funds for implementation of field activities in a timely manner should be established.

Training on alley cropping practices for selected staff at the Sloping Agricultural Land Technology Project at Mindanao, Philippines, should be considered. This method could be implemented in appropriate project areas, i.e., where slope is not excessive and where soils are of sufficient depth.

University agriculture students should be used for survey and other field work both to augment extension staff capability and to provide students with practical field experience. Linkages with TIPAN should be strengthened in all areas including crops, fruit trees, irrigation, forestry and livestock.

It is highly recommended that agricultural extension agents teach safe use and storage of agricultural chemicals to local merchants who sell pesticides so that merchants can properly instruct their customers.

Good two-way communication should be developed between extension staff and research institutes, especially TIPAN.

Extension staff should organize field days, tours to visit progressive farmers, and agricultural fairs.

Extension agents should provide beneficiaries with specific recommendations regarding various cultural practices; use of improved seeds, fertilizers and farm manure; and crop rotations for maize, wheat, cash crops and vegetables.

Extension agents should recommend the use of shelterbelts (lines of trees) around fields to reduce wind erosion, as appropriate.

A proper monitoring system should be created to assess on a frequent and routine basis extension service activities and to suggest reorientation of those activities as appropriate for local conditions.

c. Forestry¹⁵

CONCLUSIONS: Past and current afforestation efforts have been largely unsuccessful because of the poor design of the programs, haphazard implementation and failure to adhere to established management criteria. Survival rates have been well below what could be expected if plantations were raised and protected properly. No integrated watershed management project has been designed or implemented.

Villagers are now willing to organize themselves and participate in village-based social forestry programs which would provide a sustainable source of fuel, timber, and fodder, while protecting natural forests and developing future plantations in the area.

Little attention has been given to improving the quality and quantity of rangeland for forage grazing, or otherwise reversing the process of environmental degradation.

Initially, subsidies for planting and protection of plantations were useful in helping overcome local opposition. They did not appear to contribute to sustainability.

RECOMMENDATIONS: The present approach to afforestation should not be replicated in other areas since it has achieved only low survival rates.

A social forestry program should be instituted within the Gadoon-Amazai area along the lines of the Malakand Social Forestry Project and preferably within a social organization approach as described in the next section (pp. 28-33). The Malakand project and two other social forestry programs in NWFP have proven to be successful because they require community participation, are financially self-sufficient, and are sustainable. [See details in Annex 8, Vol II]

A master integrated watershed management program should be established for the entire Gadoon project area and properly implemented through the Forest Department in a phased manner.

¹⁵Vol. II, pp. 12-13, 58, 59, 82-83.

d. Orchards¹⁶

CONCLUSIONS: Fruit tree orchards have been established only in irrigated areas of the project. Since soils are marginal and little irrigated land is available (about 3% of the total arable lands), maximum production will be limited.

Land levelling and fruit tree orchard cultural practices was not adequate. This has resulted in less than optimal distribution of irrigation water.

RECOMMENDATIONS: Farmers should continue to receive training by experienced horticultural extension service personnel on fruit tree cultivation, including soil preparation, planting, pruning, budding, fertilizing, spraying, harvesting and post-harvest handling of fruit. In addition, extension workers must suggest to farmers proper intercropping practices, including crop rotation and cropping management.

Fruit tree orchards should be properly levelled in order to achieve uniform distribution of irrigation water.

Live hedges should be grown as shelterbelts to protect fruit trees from desiccating winds and storms, which would reduce yields.

e. Model Farms¹⁷

CONCLUSIONS: The model farm approach has been used satisfactory, i.e., on irrigated land. It could be improved by updating agronomic practices and recommend irrigation regimes to farmers and in documentation. No model farms were established for dry land areas.

Demonstration plots have been tried within each of the seven Union Councils to enhance agricultural productivity. The methodology needs further backstopping in technical aspects, as well as documentation.

RECOMMENDATIONS: The use of model farms and demonstration plots should be continued. Owners of model farms need to be trained in maintaining proper records for extension and research purposes. Likewise, farm owners need to be trained in how to maintain the records needed for comparison and for providing feedback to extension agents and agricultural researchers.

The model farm and demonstration plot program should be strengthened by training farmers in the latest farm and crop husbandry techniques for growing cash crops, fruit orchards, oilseed crops and vegetables.

¹⁶See Vol. II, pp. 14, 59.

¹⁷Vol. II, pp. 15, 55-57.

The suitability of establishing model farms to demonstrate the use of alley cropping (planting rows of fast growing trees) on adjacent crop, range and potential forest areas having a moderate slope (not over 50%) should be investigated as a means of controlling erosion, improving soil quality and providing fodder for animals.

Mungbeans, a drought-tolerant crop grown successfully in agronomically comparable areas in the region, has potential as both a food and animal feed crop. This crop should receive increased emphasis in the demonstration plot program.

The agro-economic feasibility of promoting expanded production of rapeseed to provide both edible cooking oil and animal feed should be considered.

f. Livestock¹⁸

CONCLUSION: Pasture and forage activities have not been emphasized in the project and animal husbandry activities have assumed a minor role, with their personnel receiving limited training.

Only two attempts have been made to introduce improved livestock varieties: Sindhi cattle were not successful and Fayoumi chickens did not succeed.

Dairy and Livestock Department budget constraints have limited veterinary outreach.

RECOMMENDATIONS: A rangeland management program should be devised as part of a village-based integrated watershed management program to help improve quantity and quality of livestock produced.

Stock assistants should receive periodic additional training following completion of the one-year pre-service training course.

Stock assistants should be provided with incentives and logistical support to reach remote areas. There they should motivate and educate the villagers on the benefits of improved livestock husbandry practices through demonstrations.

The introduction of controlled grazing (including fencing) in combination with planting of fodder grasses/trees should be considered. Under a social forestry program, one major component would be range management and forage production for animal feed, which would help alleviate the present shortages that exist in the project area.

The livestock program should have a budget sufficient for feeding trials, breed improvement programs, and animal health and disease prevention activities.

¹⁸Vol. II, p. 16.

g. Marketing¹⁹

CONCLUSIONS: Fruit and vegetable production within the project area is currently limited. It is anticipated that this activity will grow and require expanded market outlets. It appears that the opportunity to obtain commodity prices from markets outside the project area is limited.

RECOMMENDATIONS: A detailed study of present and projected marketing activities should be undertaken. Particular attention should be given to facilitating marketing of any increased production of fruit and vegetables through the construction of additional roads and bridal paths into isolated project areas.

Production of specialty crops such as strawberries and specialty fruit trees should be tried on a limited scale with particularly interested farmers.

The suitability of posting in public places the latest commodity prices from markets outside the project area should be investigated.

A survey of agriculture exports from Afghanistan should be conducted in order to assess the potential for competition in the market by NWFP farmers.

As agricultural production increases, extension agents should provide beneficiaries training on proper storage, grading and preservation of various fruits and vegetables. In the event that agricultural commodity production increases significantly, training on construction of appropriate storage, preservation and grading facilities should be made available as well. The possibility of establishing fruit and vegetable processing facilities in the Gadoon Industrial Estate should also be investigated.

h. Subsidies²⁰

CONCLUSIONS: High levels of subsidies helped the project gain access to the area which might not have been possible otherwise. The subsidies have served their purpose and should now be discontinued.

Forestry subsidies have already been phased out. A schedule for the phasing out of tree fruit subsidies has been prepared. A three year phase-out for wheat and fertilizer subsidies has been promulgated in the 10 January 1990 PIL.

Although under the circumstances subsidies were an appropriate tool to gain access to the project area, the lack of recipient contribution to the subsidy programs combined with late notice of impending reductions in subsidy levels created an undesirable welfare syndrome under which farmers view subsidies as a right rather than a temporary privilege.

¹⁹Vol. II, p. 17.

²⁰Vol. II, p. 17.

RECOMMENDATION: Subsidies for fruit tree orchards should be phased out as planned. Wheat and fertilizer subsidies should be phased out according to the 10 January 1990 PIL.

Recipients should be clearly and expediently informed of all scheduled phase-out plans. Once the plans are announced, under no circumstances should they be modified.

3. Human Resource Development²¹
a. Training Assistance

CONCLUSIONS: A sizeable number of individuals have received training. The overall impact of skills training programs, however, has not met the urgent need throughout the area for alternatives to agricultural employment.

There is no evidence of a comprehensive training plan other than rudimentary annual work plans.

The demand for vocational training in the project area is already high and will continue to rise. Communities give priority to such training and have indicated interest in participating, on a self-help basis, in construction of a technical school in the hills.

RECOMMENDATIONS: Training and job placement operations need to be combined under the direction of a professional manpower development specialist within the PCU. These functions might productively be transferred to the Sarhad Development Authority which oversees the Industrial Estate and this option should be carefully examined.

An acceleration of training efforts is needed to train a target population of 5,500, including the preparation and implementation of comprehensive work plans.

The feasibility of constructing a training facility on a self-help basis in the northern part of the project area should be examined.

b. Employment Assistance²²

CONCLUSIONS: There is insufficient linkage between the training and job placement sections.

There is no evidence of a comprehensive job placement plan other than rudimentary annual work plans. Job placement appears to be made largely on an ad hoc basis.

²¹Vol. II, pp. 18-22.

²²Vol. II, pp. 18-19.

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With termination of the project a large number of area residents employed by the PCU will face unemployment. This will happen at the same time that the project is seeking to accelerate, rather than taper off, its efforts to find jobs for area residents.

Overseas employment opportunities, though promised, have not materialized.

RECOMMENDATIONS: Training and job placement operations need to be combined under the direction of a professional manpower development specialist within the PCU or SDU, as outlined above.

Comprehensive work plans for job placement should be prepared and implemented. They should provide for outplacement services for PCU staff affected by the phase-out.

Special procedures for granting permission for overseas employment to area residents should be sought, if necessary, at high levels of government.

c. Surveys on Training and Placement²³

CONCLUSIONS: No computerized data base exists as yet for ensuring systematic management by the training or job placement officers.

RECOMMENDATIONS: The quality of all training programs and the employment status of all training graduates should be monitored. This information and other data related to training and employment should be computerized to facilitate ongoing monitoring and evaluation.

d. The Overseas Pakistanis Foundation²⁴

CONCLUSIONS: OPF has assisted in training or placing a relatively small number of area residents lack for several reasons. These include lack of a local training center in the project area, lack of communication and confusion regarding responsibility between PCU/Gadoon Industrial Estate and OPF, small numbers of area residents applying for available positions, lack of information on target group education levels and lack of clear designation of authority and responsibility among PCU, OPF and Gadoon Industrial Estate staffs.

RECOMMENDATIONS: Coordination between OPF, PCU and the Gadoon Industrial Estate should be improved. Overall responsibility for training and job placement (including monitoring) should be given to one agency and not divided as it is now.

A survey of the education level of area residents should be accomplished as part of an overall Gadoon-Amazai region socio-economic survey.

²³Vol. II, p. 19.

²⁴Vol. II, p. 20.

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e. Linkages with Industrial Estate²⁵

CONCLUSIONS: Linkages with Gadoon Industrial Estate appear limited, under-utilized and restricted by bureaucratic channels.

RECOMMENDATIONS: Direct links need to be established between the Industrial Estate and the people of the project area. The estate manager should forward employment opportunities directly to the PCU's job placement office. Job openings in the Gadoon Industrial Estate should also be publicly advertised throughout the project area.

Alternately, the Estate should be given full authority and responsibility for training and employing area residents and its performance be monitored by the SDU.

f. Construction Employment and On-the-Job Training²⁶

CONCLUSIONS: Several thousand community members have been employed in the construction of sub-projects. Project leaders have received on-the-job training in project management while workers have acquired or improved technical skills. These pools of project leaders and skilled labor would be available to undertake further projects in their communities, although they might need additional management and skill development.

RECOMMENDATIONS: PCU and USAID engineers should provide brief training sessions to villagers involved in sub-project construction to strengthen the skills they acquire on-the-job.

For future training of local residents in different trades, SDU and/or the Gadoon Industrial Estate may devise a comprehensive plan to meet the future requirements of the Industrial Estate and may thus afford preference to the local residents in employment opportunities.

4. Non-Formal Education and Women²⁷

CONCLUSIONS: The NFE program has been effective in beginning the process of providing women the opportunity to develop more fully their own capabilities as individuals and also their opportunity to participate in society.

Women have expressed a desire to learn skills which would allow them to earn additional income.

²⁵Vol. II, p. 20.

²⁶Vol. II, p. 21.

²⁷Vol. II, p. 22.

Training and supervision of women teachers has been insufficient.

Only one lady health visitor has rudimentary technical experience in health/nutrition. No NFE staff have expertise in agricultural training.

There has been little interaction between Gadoon-Amazai NFE staff and those involved in similar efforts in regions outside the project area, such as the Pak-German IRDP at Mardan.

Many potential NFE activities have not yet been thoroughly explored.

Male acceptance of NFE centers is increasing.

NFE center facilities are inadequate both in quantity and quality.

No institutional arrangements have been made with a government agency or NGO to insure the continuation of NFE activities beyond PACD. Such an institution is needed if the NFE activities are to continue beyond the termination of the project.

RECOMMENDATIONS: Support for NFE activities should be expanded including additional girls' schools and adult literacy programs. However, the NFE program should not be pressured to meet specific outreach goals: the rate of expansion of project activities should be based solely on the willingness of village groups to accept the programs.

The possibility of using vacant veterinary clinic buildings as NFE centers should be investigated. Means of improving the quality and cleanliness of existing centers should be reviewed.

The NFE program should be expanded to include women with technical experience in health and nutrition to help improve the health and well-being of area residents.

The NFE program should include additional staff women with technical expertise in agriculture and livestock husbandry. Among the activities such persons could help undertake are: (1) Train local women to operate nurseries producing seedlings for sale in the local area. (2) Help establish kitchen gardens. (3) Train women to vaccinate livestock. (During the day, when veterinarians would normally vaccinate chickens and other livestock, the men of the village are in the fields; the women would not be comfortable with a male vaccinator.) Village women could later be trained to be village livestock volunteers. (4) Teach women to plant courtyard trees for livestock fodder, fuelwood and shade. (5) Train women to rear silkworms and produce silk using locally available mulberry trees. (6) Train women to produce different handicrafts from locally available raw materials.

Teachers should be provided with sufficient training before being posted to the project area and should receive periodic in-service training.

To the extent possible, teachers should either be assigned to villages in pairs or be assigned singly to nearby villages to augment teacher morale.

Monitoring and supervision of teachers in the field should ideally be increased on a monthly basis.

Safe accommodation at the Topi office should be provided for women teachers so that they can meet with each other and supervisory staff and receive in-service training on a monthly basis.

Opportunities should be provided for periodic meetings, workshops, etc., between Gadoon-Amazai NFE staff and NFE workers from other regions, especially IRDP/Mardan.

To the extent possible, local women should be employed to conduct surveys of the needs and concerns of women in their village.

An agency to continue NFE activities after termination of Gadoon- Amazai should continue to be actively sought.

5. Institutional Development & Beneficiary Participation²⁸
a. Union Councils and Project Committees

CONCLUSIONS: Institutional development, community, and beneficiary participation has generally been limited especially at the village level. Union Councils have not been considered appropriate bodies for the selection and implementation of sub-projects. While used early in the life of the project for this, the formal role of Union Councils was eliminated entirely.

No institutionalized organization and management system is present at the village level for either implementing or sustaining long-term development; however, beneficiary participation in development decisions and implementation appears to take place most consistently and effectively at the village rather than the Union Council level.

Village-based project committees headed by a project leader became the principal mechanism used to identify and implement sub-projects. These groups effectively implemented large numbers of sub-projects over a relatively short time frame, usually below budget. Most small-scale sub-projects seem to have benefitted only a few persons.

RECOMMENDATIONS: Common interest groups in villages should be organized to operate and maintain completed facilities effectively and to undertake future projects. These groups should have wide participation and would best be started with the help of qualified social/community organizers and extension agents operating under the PCU/controlling agency.

²⁸Vol. II, pp. 23-27, 64-81, 82-83.

Among the tasks that such social organizations will need to tackle are:

- Conduct a social survey to measure the impact of progress to date, provide a base-line from which to measure future achievements, and help identify and evaluate perceived village needs. The community self-survey method used by the IRDP/Mardan should be examined for possible use in this effort.
- Conduct a land capability and utilization survey to identify existing natural and man-made resources and their current use within the project area, and draft a land use plan for the project area, drawing on the community self-survey method as appropriate.
- Develop a mechanism for the legalization and registration of village development groups to provide them with the authority to raise funds, and make agreements with line agencies, financial institutions, Union Councils, and other villages.

b. NWFP Planning and Management Capability²⁹

CONCLUSIONS: The PCU, with GOP and USAID assistance, has developed an ability to plan and implement small-scale infrastructure projects. It appears to have a large number of redundant unskilled or low-skill employees.

The PCU's data collection, monitoring and analysis system has continued to expand in terms of scope and quality. In general, data base information appears to be accurate and relevant. Information is being provided to the PCU, SDU and USAID for project management, decision making and monitoring.

The C&W has not been able to prepare satisfactory road designs and estimates. Currently construction is undertaken by private contractors, under fairly well established contracting procedures, but with inadequate supervision. To overcome these problems, USAID engineering staff have had to become involved in design and construction supervision. Completed road sections are not being maintained because of lack of funds.

WAPDA is capable of producing satisfactory plans and budgets for electrification projects. Supply of materials by WAPDA has sometimes been late; construction and installation work is usually done by private contractors, and sometimes it is not satisfactory. With the intervention of USAID engineering staff, construction defects have been corrected and the quality of work has improved. WAPDA is capable of providing all required individual connections, albeit with delays, and of maintaining completed facilities.

The Public Health Engineering and the Irrigation Departments have not been involved in the design or implementation of sub-projects, with the exception of test and tube wells. Their ability or interest to design, implement and maintain small water supply and irrigation

²⁹Vol. II, pp. 24-27.

systems in the project area seems to be limited because of the remote location and small scale of such projects. The Education Department has generally been capable of operating completed facilities.

The construction contracting procedures of C&W and WAPDA are fairly well established, and are based on open, competitive bidding. The FAR system for reimbursement of construction costs by USAID to the line agencies has worked reasonably well for electrification projects, but not for road construction projects, where reimbursement of costs based on the host-country contracting procedures seems to be more appropriate.

RECOMMENDATIONS: The PCU should continue its project management and implementation activities. As sub-projects are being completed, the technical staff should focus on assisting communities in establishing systems to sustain completed facilities. Redundant staff should start being phased out.

A review of project data collection and reporting requirements should be undertaken for each activity to ensure that the improved data management capacity of the project computer center is utilized effectively and efficiently. This effort should be repeated on an annual basis. PCU personnel should be trained to accomplish data analysis as an institution strengthening measure.

USAID, or another development agency, should consider assisting C&W in upgrading its road planning, design, construction and maintenance capacity.

The PCU should increase coordination with line agencies to ensure that completed sub-projects start being operated and maintained in a timely manner.

Reimbursement agreements between USAID and C&W for future road projects should preferably be HCC-based rather than FAR-based.

c. USAID Engineering Technical Assistance³⁰

CONCLUSIONS: The technical assistance provided by USAID engineering staff has been significant and a critical factor in the completion of some 400 infrastructure sub-projects. Completion of the 600 on-going and planned sub-projects in a satisfactory and timely manner will require a high level of supervision.

Some of the vehicles assigned to the engineering staff are not suitable for driving on rough terrain. First-aid kits and life jackets are not available.

RECOMMENDATIONS: The technical assistance provided by USAID's engineering staff at Topi should continue to ensure satisfactory completion of the remaining 600 sub-projects. With the 600 projects spread over a large area, the USAID technical assistance team should be provided with two or three four-wheel drive vehicles (which

³⁰Vol. II, p. 27.

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would substitute for pick-ups), and be supplied with first-aid kits, life jackets and other items.

As design and planning activities are completed, USAID engineers should assist communities and line agencies to establish maintenance and repair systems to ensure the sustainability of completed infrastructure.

6. Private Sector Development¹

CONCLUSIONS: Because of project interventions in increasing agricultural production and providing infrastructure, private sector involvement in both the agricultural and non-agricultural sector has increased.

Key constraints to further private sector development include lack of trained manpower, lack of appropriate credit sources, exclusion of women from the economy and insufficient infrastructure.

RECOMMENDATIONS: Continue project-assisted manpower training programs.

Basic education and vocational education opportunities for both men and women should be expanded through construction of schools and assistance to the NFE program.

Means of expanding credit opportunity for area residents should be investigated.

Planned project-assisted infrastructure sub-projects should be completed.

7. Integrated Rural Development Approach²

CONCLUSIONS: Both Gadoon and Kala Dhaka are conducive to an integrated development approach. The Gadoon project includes many of the ingredients of an IRDP model. Its project departments and field staff, however, appear to operate relatively independently, without significant levels of cross-fertilization. For example:

- Roads have been built without apparent reference to soil stabilization/afforestation requirements or maintenance.
- A number of facilities have been constructed without taking advantage of opportunities to enhance the environment and rejuvenate barren hillsides.
- Watershed management activities such as rangeland development, terracing, farming, and erosion control have not been integrated.

³¹Vol. II, pp. 28-29.

³²Vol. II, pp. 30, 82-83.

- The Gadoon Industrial Estate is setting in motion a process that can lead to negative environmental and social effects.

Signs of an integrated approach are evident in Kala Dhaka. Project management and staff include technical, social, agricultural and ecological professionals. A comprehensive social baseline survey--never undertaken before in Gadoon--is underway. Plans are being discussed concerning the development of an integrated extension approach built around a social organization program working in remote tribal areas of the North.

Cross-fertilization between the Gadoon and Kala Dhaka projects might be productive as each has elements the other lacks. For example, the Gadoon project has an extremely experienced and relatively efficient engineering component which might be useful to Kala Dhaka as it faces challenges on the infrastructure development front. The Kala Dhaka project has staff capacity and plans to initiate critical social organization outreach and the timely collection of baseline socio-economic and resource planning data, the lack of which now threaten the sustainability of programs in Gadoon.

Current attempts at integration are constrained by several key factors:

- Compartmentalization: Project specialists and departments operate independently without any institutionalized mechanism for cross-fertilization.
- Top-Down Approach: Project identification and implementation is largely done by village elites, rather than through a more broadly representative or participatory process.
- Minimal beneficiary participation: Project leaders not only identify and implement projects, but are frequently the major beneficiaries.
- Missing village/Social organization linkages: Local institutions--and the means to establish/facilitate such institutions--are needed at the village level since that is where successful integration ultimately takes place.

RECOMMENDATIONS: The integrated rural development approach should be applied for the reoriented Gadoon-Amazai project to the extent feasible, considering that almost no funds remain for the implementation of new sub-projects and that the project will soon start being phased out. The IRD approach initiated on the Kala Dhaka project should continue.

The constraints to implementing a comprehensive integrated approach are addressed by the following recommendations:

- Develop village-level organizations that promote broad beneficiary participation in an integrated approach to problem-solving at the community level.
- Create integrated extension units, such as those used successfully by the Kalam Integrated Development Project. These would be led by social organizers skilled

in facilitating the development of village organizations, and would include or have access to agricultural, forestry, engineering, health, education and/or small business/private sector development expertise.

- Promote regular staff workshops, seminars and meetings that include all disciplines in the discussion of successes and failures, problems and opportunities, and the development of action strategies.

8. Other Development Projects³³

CONCLUSIONS: Several features common to other area development projects could be used to guide the reorientation of the Gadoon-Amazai and the continuation of the Kala Dhaka project. These include: having project headquarters within the project area; having autonomy and flexibility in managing funds and in decision making; having integrated management and extension teams; focusing on establishing village development organizations; making available data bases; and instituting land use planning which incorporates social, political and environmental conditions.

RECOMMENDATIONS: Features of other area development projects should be considered for use in the reorientation of the Gadoon-Amazai, and the continuation of the Kala Dhaka project. Those for particular consideration include:

- a. IRDP/Mardan
- b. Kalam IRDP
- c. Malakand Social Forestry
- d. Sarhad Rural Support Corp.
- e. Aga Khan Rural Support Program.

C. Kala Dhaka Assistance³⁴

A baseline survey and socio-economic impact survey should be conducted and a proper land use plan should be devised.

1. Progress to Date

CONCLUSIONS: Project funding, staffing and implementation have been extremely slow. The engineering work performed to date has been a survey of about nine kilometers of the West Bank access road, using the USAID survey team from the Gadoon project.

The project office has been established well outside the project area.

³³Vol. II, p. 31.

³⁴Vol. II, pp. 32-33.

Some important activities have begun, including the placement of an interdisciplinary staff and the initiation of a social survey of area villages. The failure to provide village/social organization staff is likely to hamper effective and equitable project implementation.

RECOMMENDATIONS: Initial disbursement of funds for the project must be accelerated and a timely flow of funds throughout the life of the project insured.

The engineering and technical support staff should be increased to the level necessary for the collection of data and for the design and implementation of the large number of needed infrastructure projects.

At least three experienced social organizers should be added to the Technical Assistance Team with provision for additional staff for to the PCU, as required.

Once the project area becomes more accessible, the project office should be relocated within it to improve coordination with local residents, coordination of projects work, and to reduce travel time of project staff to the area.

A cross-fertilization between Gadoon and Kala Dhaka should be encouraged since each has elements the other lacks. Specifically:

- The Gadoon project has an experienced and efficient engineering component which can be useful to Kala Dhaka as it faces challenges on the infrastructure development front.
- The Kala Dhaka project has staff expertise necessary to initiate critical social organization outreach and the timely collection of baseline social and resource planning data, the lack of which now threaten the sustainability of programs in Gadoon.

2. Low/No Subsidy Approach³⁵

CONCLUSIONS: The project's "no-subsidy/reduced-subsidy" approach to curtailing the spread of poppy production in Kala Dhaka is appropriate. To provide high levels of subsidies would be counterproductive, unnecessarily creating the same "welfare syndrome" now undermining the sustainability of activities in Gadoon.

RECOMMENDATIONS: Employ a no-subsidy/reduced-subsidy approach for activities aimed at curtailing the spread of poppy production in Kala Dhaka.

³⁵Vol. II, p. 32.

3. Workshop Methodology³⁶

CONCLUSIONS: Professionally conducted workshops can renew the enthusiasm and commitment of project personnel while providing a vehicle for increasing cross-specialty exchange of information, ideas, and techniques for solving problems.

RECOMMENDATIONS: Continue the workshop methodology, and institute seminars and frequent staff meetings among the Kala Dhaka and Gadoon-Amazai projects.

D. Drug Abuse Prevention Resource Center³⁷

CONCLUSIONS: This fledgling project has all the earmarks of a well administered, creative and motivated organization that can be successful in combating the spreading scourge of drug addiction.

Initial political constraints appear to have become less of an obstacle to accomplishment of the organization's objectives.

This activity has not yet been integrated into Gadoon-Amazai project locations as a means of supporting drug awareness of local residents.

The DAPRC training of trainers approach is an effective use of the program's limited staff.

RECOMMENDATIONS: The program must be allowed to maintain autonomy and flexibility to fight, through any and all conventional and unconventional means available, what may become Pakistan's number one social problem.

The chief objective of the program should be to plan for the inevitable future expansion. Specifically, provision should be made to have the same authority and autonomy now afforded the program director transferred to the various sub-units, as they grow in size and scope through a systematic decentralization program. The director should play more of a motivational and less of a directive role in the future.

This activity should be extended to the Gadoon-Amazai project area, particularly in the Gadoon Industrial Estate, where there are many wage laborers, who are particularly susceptible to drug addiction.

DAPRC training of drug abuse trainers should be continued.

³⁶Vol. II, pp. 33, 36-42.

³⁷Vol. II, p. 34.

III

OPTIONS FOR THE FUTURE: BUILDING SUSTAINABLE VILLAGE ORGANIZATION

Overall, the Gadoon-Amazai project activities have resulted in some impressive achievements, particularly with regard to infrastructure development. Serious concerns about income-generating opportunities remain, however, and questions of both short- and long-term sustainability are yet unanswered.

Engineering and construction have clearly emerged as the project's most visible product and these have consumed a large part of the programmed funds and manpower. The pipeline for engineering projects is virtually full, indicating that it will take most of the project's remaining resources [allocated for construction] to complete sub-projects already approved. Maintenance and support of completed and planned sub-projects are lacking, however, and no systematic and effective program to prepare either the communities or line agencies to perform these functions is in place or even planned.

Agriculture, animal husbandry, forestry, manpower development, and private sector initiatives, having received a proportionately smaller share of the project's resources and staff than engineering or construction for these reasons and because of the inherent difficulty in operationalizing these, they have reached relatively few households, particularly among the poor, and have produced little in the way of concrete income-generating benefits. No means have been provided for stimulating village and household savings or for providing short or long-term credit.

Some issues that might usefully be addressed in designing future options include:

- a) The social and economic costs and benefits of changing from opium-poppy to a diversified agricultural and economic system
- b) The total costs associated with crop substitution, including costs per capita and per hectare
- c) Incremental change in household incomes and expenditure patterns as a result of project inputs
- d) Actual and/or % of income that is available to help pay for infrastructure and maintenance
- e) Institutions and human resources created to help manage new growth and new economy in the project area
- f) Economic payoffs from alternative development inputs, including agriculture, private sector, forestry
- g) Environmental costs and benefits associated with project inputs, including changing agriculture, livestock, afforestation, population, and the impact of construction on the cost and benefit streams and discount rate.

Missing from all aspects of the project is any mechanism for involving and directly benefiting or reaching the low-income majority of the population at the village level. In particular, there is no institutional link between the project and this segment of the



population--neither a communication or resource delivery system on the project side, nor a village level institution that can articulate local needs, mobilize local resources, implement grass-roots development, and ensure a reasonable measure of maintenance and sustainability for projects implemented by the village.

GOP and USAID have already begun looking at alternative models for achieving this objective and it is strongly recommended that this process be continued and, if possible, accelerated. Needed are:

1. Village level organizations that mobilize and involve the entire community in self-reliant problem-solving and provide a mechanism for identifying, coordinating, and effectively utilizing local and outside resources in the pursuit of sustainable development and income generation.
2. The methodology, staff, training, and resources required to develop village level organizations and to help them gain ready access to available outside technical know-how, inputs, and credit.

Among the tasks that such a social organization approach will address:

1. Design and conduct appropriate socio-economic surveys to measure the impact of progress to date, provide a base-line from which to measure future achievements, and help identify and evaluate perceived village needs.

These should not be elaborate exercises; the "community self-survey" process being used by IRDP/Mardan might serve both to gather needed data and to involve villagers in examining their needs, resources, and potential for development.

2. Design and conduct a land capability and utilization survey to identify existing natural and man-made resources and their current use within the project area. This, again, need not be elaborate, and may be accomplished with community input.
3. Develop mechanisms for the legalization and registration of village development organizations that provide them with the authority to raise and solicit funds, and to make contracts and agreements with other institutions, including line agencies, financial institutions, donors, Union and District Councils, Administration, and other villages.
4. Institute a comprehensive social-forestry program as described on page 14. For details see model presented in Annex 8, Vol II.
5. Develop procedures for opening up village savings systems and revolving funds, and for providing the necessary financial tools for applying for and utilizing matching grants--for small projects at the household and village levels as well as for larger projects for the entire area that involve sub-projects in many communities.

The VDOs will need to be flexible in structure and operation. They will be able to formulate development plans in accordance with felt needs/basic needs and/or the development of existing and potential resources. Such development plans/projects can be financed by donors under the aegis of Government. Donors might also wish to provide technical help through expatriate staff as required for specialized tasks. For a description of one possible model see Annex 9, Vol II.

For maintenance of existing projects and for embarking on new projects, community participation can be assured through the installation of revolving funds kept in a VDO account in a local bank. Through such accounts local contributions and savings, as well as community income derived from sales of agro-forestry products, can be tapped for development initiatives. Provincial government and/or donors can also lend help in the form of matching grants for specified projects. These VDOs could evolve into marketing cooperatives for the sale of their agricultural products.

Some Potential Models for Reshaping the NWFADP

Fortunately, a variety of successful and internationally recognized organizational options, both governmental and non-governmental, are available for close examination and reality-testing. These are not just in Africa or Asia, but within Pakistan, and more specifically within NWFP. One of them even adjoins the project area while the others are nearby. It is recommended that USAID and the Government of NWFP make the necessary plans to reach a consensus on the model most appropriate for the Gadoon-Amazai area and to begin the necessary arrangements as soon as is feasible.

Some necessary and common features of these different approaches that are relevant to Gadoon-Amazai include:

1. Capacity to provide technical and administrative support, financial backing, and training to both field staff and VDO members.
2. Experience in constituting VDOs through village elections, consensus, and/or traditional Jirga procedures conducted in a democratic manner, as they are already practiced in Malakand Social Forestry, Kalam Integrated Development, and IRDP/Mardan projects.
3. Linkages and expertise needed to market packages of project activities to interested foreign donors.

Whichever model is selected, it would provide a core staff stationed at a central location in the hill area of Gadoon. Outreach extension workers and/or locally recruited facilitators can also be located in each Union Council to respond to the requirements of one or more VDOs. These integrated extension teams will include technical personnel with relevant support staff. Support may also be provided to organize training programs to facilitate job placement at the Industrial Estate; to provide dissemination of agricultural forestry

know-how; to arrange exchange visits and field trips to facilitate information exchange among progressive farmers, technical specialists, and local residents; and to expand or strengthen NFE programs for local women.

A nucleus of technical support staff to help VDOs grow and operate effectively, and to provide links with line agencies, local organizations, NGOs, and donors might include:

- a. Project Director/Social Organization Specialist
- b. Stenographer (PA)
- c. Accountant and 12 Junior Clerks
- d. Human Resource Development Specialist
- e. Program Officer
- f. Assistant Engineer
- g. NFE Section Head and 12 Female Outreach Workers
- h. Integrated Extension Team, including:
 1. Social Organizers(12)
 2. Sub-Engineers(12)
 3. Agriculture Specialist
 4. Forestry/Social Forestry Specialist
- i. Support Staff, vehicles, and equipment

Three options for putting such a structure in place are outlined for discussion purposes:

Option A:

Reorientation of the Project Coordination Unit

Strengths:

1. Area residents are familiar with the PCU
2. The PCU can build on the existing structure
3. Residual funds from Gadoon-Amazai could pass through existing channels with minimum problem

Weaknesses:

1. The fact that it is part of bureaucracy reduces autonomy/flexibility
2. The PCU has a history of working through subsidies
3. The PCU is identified with the negative aspects of poppy elimination

The PCU could continue in a reoriented form to provide for the maintenance of some important sub-projects and for planning/formulation of new development efforts to be financed by Government or offered to donors in the future. A scaled-down PCU, with a staffing structure like that described above, could take on as many of the above

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approaches as might be feasible, perhaps also shifting to a new office or sub-office in the hills.

This approach would have several strengths including the fact that area residents are familiar with the PCU and many have developed respect for the unit and some of its staff; it builds on an existing structure; it would be the easiest and least expensive to implement; and money from residual project funds and/or from other sources could pass through existing channels with minimal problem.

Working against this option are the constraints to flexibility and autonomy associated with being part of the bureaucratic system. In addition there is a long history of identification in the minds of local people of an organization that was built on subsidies, "give-aways," and the negative aspects of the enforcement action against poppy producers. These are unfortunate political dynamics that could work against the successful development of broad-based, self-help initiatives.

Option B:
Government Approach: Expanding the Mandate of IRDP/Mardan

Strengths:

1. Experience with Village Development Organization development and maintenance
2. Experienced core staff familiar with Gadoon-Amazai conditions and with the ability to extend existing programs
3. A mandate to operate in the entire Swabi area, which includes most of the Gadoon-Amazai area

Weaknesses:

1. Association with the government could limit flexibility and autonomy
2. Risk that the additional workload could temporarily over-extend IRDP/Mardan staff until replacements could be trained

The Government might consider extending the jurisdiction of the Pak-German IRDP/Mardan--or constitute a parallel organization along the same lines--to constitute and support the development of village development organizations in Gadoon. Its mandate already includes the entire Swabi area but it has not operated in the Gadoon area only because of potential overlap with the NWFADP.

The IRDP/Mardan could further coordinate and integrate the activities of various village development components within the VDOs and among the VDOs.

Technical staff from IRDP/Mardan would support a specialized core staff based in the Gadoon hill area and would provide necessary links with government line agencies, local

organizations, NGOs and donors operating in the Province. They would communicate through IRDP and PCU headquarters at Mardan and Topi.

This option would risk the constraints to flexibility and autonomy associated with being within a government bureaucracy as well as the danger that the locus of attention would remain in Mardan, rather than Gadoon. On the other hand, it would draw on a successful model already operating adjacent to the project area, thus minimizing logistical problems and maximizing useful information and resource exchange between comparable ecological and social systems.

Option C:

Non-Government Organization Approach

Strengths:

1. Maximum flexibility and local autonomy
2. Experience with Village Development Organizations
3. Possibility of funding from various donors

Weaknesses:

1. Risks associated with start-up of a new organization
2. Lack of direct experience in areas directly comparable to the Gadoon-Amazai area.

A non-government organization (NGO), either a new entity or an expanded existing body, might be given responsibility for village organization development in the Gadoon-Amazai area. Such an NGO would assume the role of the Government, as described above, and would help constitute local VDOs. It would draw on the experience of other organizations that have a proven track-record in developing effective village organizations, such as the Aga Khan Rural Support Program (AKRSP). The NGO would help constitute local VDOs and then provide all technical, organizational, administrative and financial support for the planning, formulation, and implementation of village development projects.

The main purposes of this approach would be to sustain the accomplished projects and to execute new ones through active community participation, drawing on the expertise and resources of line agencies, the NGO and its network.

The Sarhad Rural Support Corp. (SRSC) is a new NGO organized along the lines described here. It has an elaborate charter of its duties and functions in rural areas which might be used as a model. It also has an experienced Board of Directors, some of whom it may be appropriate to invite to assist in the initiation and oversight of the new project.

If appropriate, the SRSC might expand its mandate to include the Gadoon area. The SRSC design would fit well with discharging responsibility for a comprehensive development strategy for the project area. The design includes a multi-sectoral,

integrated area development approach that can handle most of the functions now performed by the PCU. Over time, it would gradually replace the PCU without problematic external change or internal dislocation.

This NGO option runs the risks associated with the start-up of any new organization. If linked to SRSC, it might also risk overstressing the capacity of a fledgling organization. An NGO would, however, provide maximum flexibility and autonomy, since it would be free from the day-to-day bureaucratic constraints of a government agency, could avail itself more readily, perhaps, of a wide variety of international donor interest, and could make maximum use of the extensive VDO experience of the AKRSP network.

IV

LESSONS LEARNED

From its conceptual inception as a poppy eradication effort, the project evolved into a comprehensive area development program that sought to develop a diversified agricultural and non-agricultural system within the Gadoon-Amazai area and later in Kala Dhaka.

It is, of course, presumptuous to make retrospective prescriptions concerning a successful but high risk project that was confounded by political, social, environmental, and economic constraints. The successful elimination of poppy production indeed demands an integrated approach to area development and the project has been correct in seeking to implement such an approach for several reasons:

- There is no single substitute for poppy. Replacement of poppy income demands a comprehensive improvement of the agricultural system together with the development of off-farm income generating opportunities.
- Agricultural improvements demand a systems approach that includes intercropping, irrigation, agro-forestry, livestock development, and infrastructure.
- Infrastructure improvements, including roads, electrification, schools, clinics, water supply and irrigation systems depend on technical support from line agencies in order to become operational, and be properly maintained and operational.
- Infrastructure improvements require ecological planning to prevent environmental degradation.

Other features required for future initiatives as proven in this project include:

- Autonomy and flexibility in terms of planning, budgeting, and day-to-day decision-making.
- Leadership from a development oriented and trained professional and core staff with expertise in social organizing and income-generating aspects of agriculture, livestock, forestry, and small business/private sector development.
- Project headquarters within the project area to encourage close contact between project and target population.
- A bottom-up approach and methodology for building self-reliant grassroots village development organizations that can take on the responsibility for sustained development and are responsive to community needs.

With the caveat that lessons learned are really little more than hypotheses of testing in comparable future endeavors, these changes might be considered of project design efforts:

- 1. A social development component built around a village level organization scheme with more direct recipient involvement should be included from project inception.**
- 2. The phase-out of subsidies should begin early, particularly if a social organization team is in place to facilitate the development of self-help activities.**
- 3. The level of subsidies provided in this project should not be as high in future endeavors.**

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List of Abbreviations and Acronyms

AID	Agency for International Development (U.S.)
AKRSP	Aga Khan Rural Support Program
C&W	Communications and Works Department
DAPRC	Drug Abuse Prevention Resource Center
DC	Deputy Commissioner
FAR	Fixed Amount Reimbursement
FATA	Federally Administered Tribal Area
GAADP	Gadoon-Amazai Area Development Project (former designation of the present NWFADP)
GONWFP	Government of North West Frontier Province
GOP	Government of Pakistan
HCC	Host Country Contracting
IRD	Integrated Rural Development
IRDP	Integrated Rural Development Project
KIDP	Kalam Integrated Development Project
LG&RD	Local Government and Rural Development Department
NFE	Non-formal Education
NGO	Non-governmental organization
NWFADP	North West Frontier Area Development Project
NWFP	North West Frontier Province
OPF	Overseas Pakistanis Foundation
P&D	Planning and Development Department, NWFP
PACD	Project Assistance Completion Date
PATA	Provincially Administered Tribal Area
PCU	Project Coordination Unit
PHED	Public Health Engineering Department, NWFP
PIL	Project Implementation Letter
PCC	Project Coordinating Committee
PRB	Project Review Board
PLA	Personal Ledger Account
PNCB	Pakistan Narcotics Control Board
PP	Project Paper
SDU	Special Development Unit, NWFP Planning and Development Department
SOW	Scope of Work
SRSC	Sarhad Rural Support Corporation
T/V	Training and Visit System (agriculture extension)
TA	Technical Assistance
TIPAN	Transformation and Integration of the Provincial Agricultural Network Project
UC	Union Council
UNDP	United Nations Development Program
UNFDAC	United Nations Fund for Drug Abuse Control
USAID	United States Agency for International Development
VDO	Village Development Organization
WAPDA	Water and Power Development Authority

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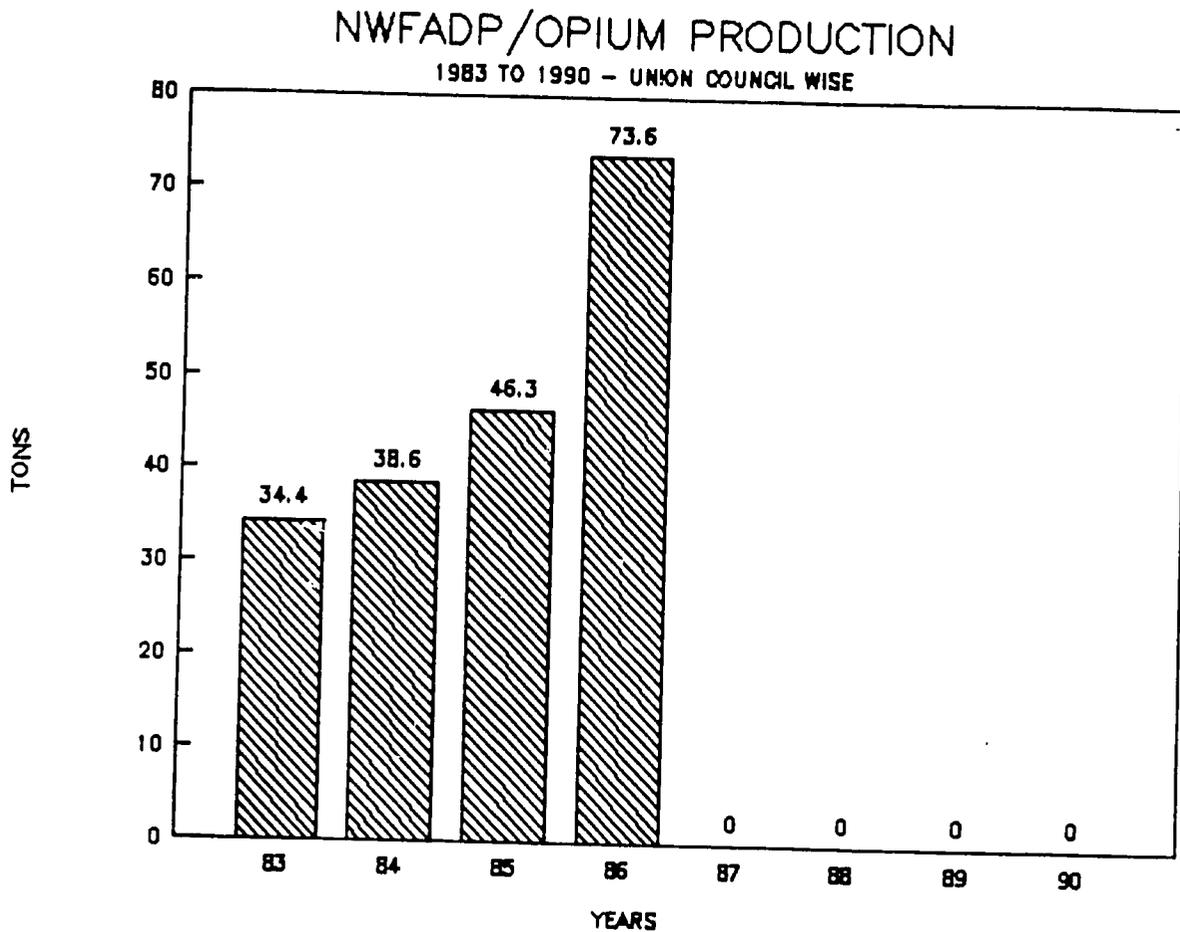
REVIEW OF PROJECT ACTIVITIES

The first part of this section is concerned with the degree to which poppy cultivation has been eliminated in the Gadoon-Amazai area; the second part involves the more complex issue of the diversification and development of the area economy; the third part reviews the start-up activities of the Kala Dhaka project component; and the fourth part focuses on the recently established Drug Awareness Prevention Resource Center (DAPRC).

A. Eradication of Poppy Production in Gadoon-Amazai

Opium poppy has been virtually eliminated from the project area. The area under cultivation has dropped from an estimated 8,800 acres in 1987 to only 22 acres in 1990, while actual production has been nil since 1987, poppy plants having been destroyed by enforcement agents before harvest (Table 1).¹

TABLE 1



Source: PCU/USAID; G.O.P. Revenue Dept. Swabi, Abbotabad, and Swat.

¹See also Table A-2, p. 56.

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While local residents and their leaders have turned away from poppy, they have done so because they perceive themselves as having made an arrangement with the government that the government is committed to enforcing the law, and that their loss of poppy income will be offset by accelerated economic and infrastructure development. The linkage between the development and diversification of the economy and continued absence of poppy production remains strong.

B. Developing and Diversifying the Area's Economy

Development and diversification of the area's economy focused on the provision of infrastructure, the establishment of an industrial estate, agricultural interventions, manpower development, formal and non-formal education for women, and institution building, within the context of an integrated rural development approach. Progress was extremely limited during the first three years of the project but that has dramatically increased during the past four years. Once a relatively isolated and disadvantaged, today it is part of the regional economy. With the eradication of poppy production agricultural incomes have dropped although crop production has risen significantly. Infrastructure has increased substantially, but lags behind adjoining lowland areas.

1. Provision of Infrastructure

Infrastructure developed under the project has included roads, electrification, water supply and irrigation systems, schools, health facilities, and basic site infrastructure for an industrial estate.

a. Core Infrastructure

The findings on the physical outputs achieved to date, the feasibility of completing the approved sub-projects by the Project Activity Completion Date (PACD), and the operational and maintenance status of completed facilities are discussed below.

i. Physical Outputs. The original project paper provided infrastructure development targets for 1983-1988; additional targets for 1989-1993 were included in the 1988 amendment. Targets and the status of project implementation are shown in the following tables.

**TABLE 2
STATUS OF SUB-PROJECTS
JULY 1990**

SUB-PROJECT SECTOR	PP & AMEND. TARGETS	COMPLETED	UNDER CONSTRUCTION/ APPROVE	TOTAL ^{(a)(b)(c)(d)(e)}
ROADS (kms)				
•paved	28	13	4	17 ^(a)
•shingled	71	34	23	57 ^(a)
•bridle paths	150	3 ^(b)	-	3 ^(b)
ELECTRIFIED VILLAGES	57+	27	13	40
WATER SUPPLY SYSTEMS	95	60	103	163
IRRIGATION (acres)	1,125	800 ^(c)	2,700 ^(c)	3,500 ^(c)
•irrig. channels	^(d)	128	208	336
•dug wells	^(d)	48	175	223
•tube wells	^(d)	5	13	18
SCHOOLS (total)	70	57	96	153
•primary boys	^(d)	31	42	73
•primary girls	^(d)	4	37	41
•middle boys	^(d)	13	12	25
•middle girls	^(d)	1	1	2
•high boys	^(d)	6	6	12
HEALTH UNITS	1	1	8	9
VET. DISPENSARIES	^(d)	10	6	16
TOTALS	1,597	1,241	3,447	4,688

NOTES:

- (a) Includes about 12 miles under construction but not yet funded
- (b) Essentially discontinued during phase-I
- (c) Actual acreage irrigated depends on land levelling, other factors
- (d) Not indicated
- (e) Completion of all sub-projects will exhaust most infrastructure funds

Source: PCU and AID records.

**TABLE 3
COMPLETION OF SUB-PROJECTS
AUGUST 1990**

COMPLETION	SCHOOLS	HEALTH	DISP.	WATER SUPPLIES	OTHER (REST HOUSE LAND LEVELING)	ELECTR.	IRRIG.	TUBE WELLS	DUG WELLS	ROADS	ALL
100%	55	1	8	59	10	27	124	15	48	7	354
90-99%	5	1	2	4	1	0	3	1	2	2	21
75-89%	3	1	2	4	0	0	7	0	5	2	24
51-74%	2	2	2	7	1	0	9	0	12	2	37
26-50%	13	0	1	3	2	0	18	1	6	1	45
00-25%	75	4	1	87	3	27	175	0	153	1	526
ABANDONED	0	0	0	0	0	0	0	8	9	0	17
TOTALS	153	9	16	164	17	54	336	25	235	15	1024

Source: USAID, Peshawar, August 1990

The road sub-projects are located in the central and western parts of the project area; there are no roads in Baitgall Union Council. Most electrification sub-projects are located in the four union councils of Swabi District and in Nara Union Council of Abbotabad District. Water supply, irrigation, school and health sub-projects have been widely distributed throughout the project area.

The design characteristics of infrastructure facilities are summarized below:

- **Roads:** 24' total width, 12% maximum grade; paved roads have a subbase, a basecourse, and a 12' wide bituminous surface course; the surface course of shingle roads consists of a subbase or of the excavated subgrade; causeways are provided at large water crossings, and box culverts at defined channels or at 600' intervals; drainage ditches are provided along the road cut; dry random rubble retaining walls have a base thickness equal to 1/2 of height and an outer slope of 25%.
- **Electrification:** poles, transmission lines, transformers are in accordance with Water and Power Development Authority (WAPDA) standards and specifications.
- **Water Supply Systems:** water is obtained from springs or streams through cutoff walls, stone filters and intake channels; flow is gravity based; pipe diameters vary from 1" to 4"; concrete storage tanks have a 500-1,000 gallon capacity.
- **Irrigation Channels:** water is obtained from springs or streams through weirs; channels are concrete, 4" thick; internal channel dimensions are 12" x 8"/12"/18" or 18" x 18".
- **Dug Wells:** usually less than 120' deep; dug diameter is 13', with a 1.5' thick masonry lining, for a 10' clearance; pumps are diesel or electrically powered.
- **Tube Wells:** about 300' deep, drilled; pumps are electrical, turbine type.
- **Buildings:** brick or stone built, with corrugated metal or concrete roofs; power, water supply are provided at health units and dispensaries and, if available, at schools.

Roads are constructed by private contractors under the supervision of the Department of Communication & Works (C&W). Road construction has been relatively satisfactory considering the low volume of traffic anticipated. Some sections, however, do not have drainage ditches or catch drains, resulting in erosion; parts of some masonry retaining walls have crumbled, due to poor construction or the utilization of heavy equipment near the edge of the road; several landslides were noted. On some unfinished sections there was no visible construction activity, the contractor having stopped work or left the site. Lack of maintenance of these sections has resulted in the filling of drainage ditches and the formation of scouring and potholes on the roadway.

Electrification works are implemented by WAPDA's field staff or contractors. Electrical installations are satisfactory although this was not the case at the beginning. Improvement has come through the supervision and support of USAID engineers. Tube wells are drilled by WAPDA and equipped by the Irrigation Department, and appear to be well constructed.

All other sub-projects (water supply systems, irrigation channels, dug wells, buildings for schools, health units and veterinary dispensaries) are constructed under contracts awarded to community project committees. Water supply systems visited appear adequately installed although some water storage tanks were found to be overflowing. Irrigation channels visited were generally satisfactory. Some weirs, however, appeared to be too weak to withstand the impact of large boulders carried during heavy floods; some channels had inappropriate slopes, slowing flow or causing hydraulic jumps, and some were not properly lined. Construction of dug wells appears to be satisfactory, except for some inappropriately spaced or missing collars. Buildings appear to be satisfactorily constructed; however, concrete was often found to be insufficiently cured.

ii. Completion of Approved Sub-Projects by PACD. The monitoring reports do not indicate the estimated completion dates of infrastructure sub-projects which are either under construction or approved. Over the past three years the project has completed an average of one sub-project every three days. PCU and USAID engineering staff have indicated that the on-going and approved sub-projects can be completed by the PACD, provided no more sub-projects are added to the pipeline and an adequate level of supervision and technical support is maintained.

Considering that about two thirds of the approved roadwork has been completed during the last six years (the majority since 1987), it appears feasible to complete the remaining one third by mid-1993 provided that construction restarts soon in the sections where it has stopped. As 13 villages were electrified by WAPDA during the period October 1988 - June 1990, it should be possible to start and complete the remaining 13 approved electrification sub-projects over the next two years.

Of the approved community constructed sub-projects (water supply systems, irrigation channels, dug wells, buildings) about 310 have been completed, 460 are under construction and 140 have not started. The on-going and approved community sub-projects are spread geographically throughout Gadoon-Amazai, and are being or can be carried out simultaneously. Since the average construction period for community sub-projects varies from six months to two years, it appears feasible to complete these on-going and approved sub-projects before the PACD provided an adequate level of engineering supervision and support is provided to community construction crews.

iii. Operation and Maintenance of Completed Sub-projects. C&W (see: Table 3. p.4) is responsible for maintaining completed road sections. Roads completed under the project (some as early as 1986) have been receiving very little, if any, maintenance, apparently due to a shortage of funds. Road deterioration is evident, including filling of

drainage ditches, potholes, scouring of road surface, and landslides which often cover or erode farmland.

WAPDA is responsible for operation and maintenance of electrical facilities. Completed electrification sub-projects seem to be in good condition. About 10%-20% of the houses in electrified villages have already requested connections from WAPDA. Connections take about three months and their cost is relatively high (Rs 1,000-2,000 payable as a lump sum).

The Public Health Engineering Department (PHED) is responsible for operating and maintaining large water supply systems. PHED did accept small water supply systems in Nagrai Union Council, but is reluctant to accept more such systems because they are small, widely dispersed, and difficult to reach and maintain. Communities are normally responsible for maintaining small water supply schemes. No maintenance procedures and systems appear to be in place and some schemes visited need repairs, having missing taps, leaking pipes, and/or water tanks.

Irrigation channels are owned by one or a few individuals who are responsible for their maintenance. No maintenance procedures or systems appear to be in place. Some irrigation schemes visited had damaged channels, retaining walls and weirs and need repairs. Dug wells are also owned by one or a few farmers who are responsible for their maintenance. The wells visited seemed to be in good condition. No well or pump service/maintenance procedures appear to be in place, however. Many irrigation schemes are not operational because land leveling has lagged behind the provision of irrigation systems.

Tube wells are operated and maintained by the Irrigation Department which charges water users. Of 17 successful test wells five have been completed as tube wells: two are within the Industrial Estate; two are near the Industrial Estate and may end up within it if it expands further; one is ready to be used for irrigation, but the beneficiaries refuse to pay water charges and the Irrigation Department will not operate it without payment. This stalemate has not been resolved.

Completed schools are handed over to the Education Department, which assumes responsibility for their staffing, operation and maintenance. Most of the constructed school buildings replaced previously rented facilities so they do not represent a new burden for the Education Department. Delays of up to a year have been reported in staffing schools at new locations, however, particularly girls' schools. Schools visited generally appeared to be in good condition, with some requiring repairs.

One health facility has been completed under the project, in Baitgali, and it is ready for handover to the Health Department; another in Ganichatra appears ready for operation. Operation of veterinary dispensaries is the responsibility of the Dairy and Livestock Department; the project however, has been paying the salaries of staff operating the dispensary sub-projects completed to date. Apparently, the number of dispensaries constructed in some Union Councils is greater than needed, and some of these facilities will probably be converted to other uses.

b. Industrial Estate Infrastructure

Project support to the government subsidized industrial park known as the Gadoon Industrial Estate was limited to the provision of an infrastructure system for the first 15% of the site. Current infrastructure development activities in the Estate are discussed below.

i. Provision of Infrastructure System. The project financed infrastructure in the Gadoon Industrial Estate covers an area of 195 acres and includes: 2,760' of main paved roads (22' roadway and two 9' shoulders); 11,120' of branch paved roads (22' roadway and two 5.5' shoulders); 27,000' of concrete drainage channels; two tube wells with pumphouses; two 50,000-gallon water tanks; 9,565' of 8" water main; 17,300' of 3" water branches; and one office and one store building for the Sarhad Development Authority. The above facilities are complete, except for one water tank still under construction. The design standards and construction quality appear to be satisfactory.

A USAID sponsored environmental assessment of infrastructure construction in the 195-acre area was completed in 1987, and an environmental assessment of anticipated industrial construction and operations was completed in March 1989.

ii. Current Status of the Industrial Estate. Provision of infrastructure in the Industrial Estate is expanding beyond the 195 acres developed by the project, to cover an additional 1,300 acres. A large excavated area used as borrow for the Tarbela Dam will be used to dispose solid industrial waste; liquid wastes, following pretreatment, would be disposed of in natural drainage channels.

The industrial estate expansion is underway in response to the large number of firms seeking to take advantage of the substantial tax and other government incentives for establishing industries in Gadoon. Eighteen factories are now in operation, six are ready for occupancy and 127 are under construction. A total of 546 applications for establishing factories have been approved, 70 more applications are being reviewed. An SDA-sponsored master plan study for the Industrial Estate, covering industrial expansion, housing, transportation, social, environmental and other issues, is reportedly under preparation but its scope is not known.

2. Agriculture

Under the agricultural sector, sub-projects are discussed which include agricultural development, extension, forestry, orchards, model farms, livestock, marketing and subsidies.

a. Agricultural Development

Overall, agricultural intervention in the area has been effective given the difficult physical and social obstacles. However, as no pre-project baseline natural resources and socio-economic survey of the project area was conducted, some project impacts cannot be easily quantified.

Despite project inputs, however, total value of agricultural production in the project area decreased from approximately 122 million rupees in 1984/85 (prior to opium suppression) to 98 million rupees in 1988/89 when virtually no poppy was produced. (Rupee values adjusted for inflation) (Table 4).

Loss of income from poppy has been partially offset by an increase in cropping intensity from about 130% to 160%. (Cropping intensity is defined as the fraction of total arable land cultivated in a given year. Cropping intensity can exceed 100% when more than one crop is grown on some or all of that land in the same year.) It is expected that income will increase further by about 15 million rupees to about 113 million rupees when the anticipated 1,000 acres of newly introduced fruit trees on irrigated land are in full production (estimated value: 10,000 rupees/acre) and production of irrigated seasonal vegetable crops is expanded (estimated value: 5,000 rupees per acre). The result is that despite productivity increases the agricultural sector will probably not be able to generate sufficient income to equal the value of poppy production.

The Gadoon-Amazai area is now and will continue to be a food deficit area for the foreseeable future, although PCU estimates suggest that the net staple food production deficit (wheat/maize) has been reduced from approximately 65% prior to the project to about 10% at present. Part of the decrease in food deficit was due to project efforts to increase wheat and maize production. Another part was due to the shift from poppy production: prior to the project, farmers were not motivated to maximize wheat and maize production. They maximized their income by growing poppy on their most fertile land, with wheat planted only on marginal land. They then sold their opium and purchased staple foods with the profits. With the elimination of poppy, farmers planted former poppy areas (and perhaps additional areas) to food crops.

TABLE 4
CROPPING PATTERN, YIELDS AND GROSS RETURNS

CROP	<u>Acres</u>		<u>Yields-Kg/Acre</u>		<u>Production in Tonnes</u>		UNIT ITEM VALUE CURRENT Rs./Tonne	<u>Total Value-Rs. Millic</u>	
	PRE- PROJECT	1990	PRE- PROJECT	1990	PRE- PROJECT	1990		PRE- PROJECT	1990
Wheat	12137	26000	450	900	5482	23400	2400	13.10	56.16
Maize	16541	21036	600	950	9937	19984	2000	19.87	39.96
Barley	497	648	500	500	249	324	2000	0.49	0.64
Poppy	8824 ^(a)	0	10	0	88	0	1000000	88.00	0.00
Oilseed	247	1000	400	600	99	600	2500	0.24	1.50
Pulses	59	171	200	250	12	43	3500	0.04	0.15
Vegetables	98	1000 ^(b)						0.00	0.00
Sugarcane	113	135	14000	16500	1582	2228	350	0.55	0.78
Fruit	0	1000 ^(c)	0	0	0 ^(c)	0	0 ^(c)	0.00	0.00 ^(c)
Orchards									
TOTAL:	38516	50990	-	-	-	-	-	122.29	99.19

^(a) Maximum opium crop production in 1987 year

^(b) Additional area to be brought under irrigation will grow high cash value vegetable crops

^(c) Orchards are not bearing fruit yet but are expected to start commercial production after 3-4 years.

Source: 1) Acreage: Gov't Rev. Dept., SWABI, SWAT Abbot.
2) Yields: Ag. Dept. Yield Data
3) Value: Ag. Market Dept.

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In order to generate supplemental income for farm families in the project area, off-farm employment and the non-agricultural system were made an integral component of the project, e.g., employment generated from the Gadoon Industrial Estate, Overseas Pakistanis Foundation and the Non-Formal Education program. Also, farm families often have one or more male members who have departed the area to obtain employment on a temporary or permanent basis within the country or overseas. This employment has enabled these individuals to send remittances to families within the project area. At this time, there is no data available on the number of persons employed or the amount of funds remitted. Thus estimates of total household income before or after project implementation are not possible.

Project supported road construction and improvement have enhanced access to markets both within and outside the project area. Many new small shops and markets have been established in the project area selling a varied selection of dry goods, cooking oil, etc., as well as various agricultural commodities including fertilizer, pesticides and farm equipment. Regular commercial private transportation has been introduced into the area. What little agricultural surplus there is in the project area is generally marketed locally. Out of the seven Union Councils, Nagrai is the only one producing a surplus of wheat. This can be attributed to the area's having sufficient rainfall, relatively good soils, a viable administration and its not being a poppy growing area. The agricultural sector is sustainable provided all the factors of production are available on a timely basis, there is adequate rainfall and the current population density within the Gadoon-Amazai project area remains stable. Another requirement is that the GOP continues its enforcement policy towards poppy eradication.

The original project goal of assisting 10,000 farmers to increase agricultural production on their land has been met and exceeded. The High Yielding Variety (HYV) wheat program alone was extended to over 15,000 farm families. Because of project interventions, HYV wheat, the primary staple food in the area, is grown by virtually all farm families. Average wheat yields during Phase I of the project (1984-1988) increased by as much as 100% from 450 kg/acre to 900 kg/acre. HYV maize is now grown by approximately 70% of the families, resulting in an increase of 58% in average yields from 600 kg/acre pre-project to current yields of 950 kg/acre.

The technical support provided by the USAID program specialist/agriculturalist and line agency staff at Topi has been instrumental in bringing about this successful transition from a poppy-dependent economy to one based on diversified agriculture.

b. Extension

The extension service personnel assigned to the Gadoon-Amazai Project were instrumental in expanding the crop diversification program through the implementation of on-farm demonstration plots, providing technical assistance to the farmers utilizing the "training and visit" (T/V) extended crop message program. They also performed additional agricultural extension tasks to enhance the overall agricultural sector of Gadoon-Amazai. The program impact was adversely affected by limited staff and farmer training, sometimes slow disbursement of funds and insufficient transportation.

Agricultural Extension strengthening actions taken to date have included expansion of the T/V system to insure that all farmers receive timely agricultural production advice. To help insure that all farmers receive T/V services, staffing levels have been increased to 16 field assistants, 42 field workers, 40 zari karkuns and 3 budders. To provide mobility for T/V personnel, 1 pickup truck and 5 motorcycles plus O&M funds for the vehicles were provided although staff mobility is still limited. In addition, agricultural extension personnel were provided inducement to work in the project area in the form of allowances: an additional 45% of basic salary for GOP staff and 50% of basic salary for PCU staff.

Personnel from the agricultural extension service and the GOP Crop Statistics Department collect sample yield data on a regular basis from the Gadoon-Amazai project and provide it to the PCU for entry into a computer data base at Topi. A limited analysis of data is made by the program specialist (TAT USAID/Peshawar) and is reflected in project reports. Data utilized by the evaluation team was obtained from these documents. This data should be used as an indication of relative trends rather than absolute values.²

Project agricultural extension officials at Mardan and Topi indicated that they had problems with slow disbursement of funds. This had an adverse effect on timely completion of project agricultural activities. In addition, extension staff were put under pressure by self-interest groups to circumvent project regulations to allow those individuals to benefit from the subsidy program.

The extension agent is a vital link between research and the farmer. One refresher course was provided in 1988 for all extension staff and 87 progressive farmers, involving orchard cultural management practices and techniques for vegetable production. A second refresher course sponsored by USAID was scheduled for 8-14 September 1990 in Peshawar to be conducted by the Agriculture University, Peshawar and The Transformation and Integration of the Provincial Agricultural Network Project (TIPAN). The participants included the entire extension staff from the Gadoon-Amazai area including 3-4 women from the NFE Project. Other than that, little organized or formal training was provided. Upgrading of the extension service personnel through periodic in-service training and refresher course work at an institution of higher education is non-existent.

In the Project Paper Amendment 1988 and the PC-1 Paper 1988 pertaining to the Gadoon-Amazai Project reference was made to a new linkage to be developed with the Agricultural University, Peshawar. These documents indicated that the Gadoon-Amazai Project would become a laboratory for TIPAN research, and that the TIPAN Outreach Program would provide training for Gadoon Agricultural Extension Agents.

Two years have passed since these activities were supposed to have been implemented, but no action has been taken by TIPAN despite a number of efforts by PCU and SDU to improve linkages.

²See Tables A-3 through A-5, pp. 57-59.

c. Forestry

More than 80% of the total project area is appropriate for forestry and rangelands for animal grazing. However, the vast majority of the original forest in the project area has been destroyed. What few forest trees remain within the project area are slowly being decimated by farmers cutting tree limbs for fuel wood, leaving only the top-most branches of the trees. Whole trees are cut for local construction of house and for sale.

Two afforestation efforts have been attempted by the project. Under the first effort begun in March 1987, a total of 3,650 acres had been planted to native forest species. The trees were planted on 360 plots each between 4 to 12.5 acres each. Each plot was owned by one farm family. Three monitoring surveys of survival rate were conducted. The final survey, done in December 1989-January 1990 reported a survival rate of only 28% approximately 20 months after planting. [Source: USAID/Peshawar Monitoring Reports]

Farmers participating in this reforestation program received free seedlings from the project and were paid 1.5 rupees per seedling planted. As an incentive to farmers to join the program, each land owner received 750 rupees per month to pay a caretaker. The payment for caretakers was made for two years. As of this evaluation, the two year period has ended for all participants and these payments have been terminated.

In an attempt to improve the survival rate, a second afforestation effort was implemented. In March and April 1990, the small plot scheme was replaced with a large block system. Under the large block system, 20 blocks of 100 acres each were planted by 143 beneficiaries. Each block was owned by an extended family. One and one half months after planting, only 351,000 trees survived out of the 860,000 trees planted, a survival rate of only 40% which is very low for such a short period after planting (Table 5)³.

TABLE 5

**LOCATION OF FOREST BLOCKS AND
NUMBER OF BENEFICIARIES**

Union Council	No. of Block	No. of Beneficiaries	Trees Provided	Trees Sustained
Gandaf	3	11	129,250	38,201
Kabgani	3	14	131,800	36,113
Ganichatra	3	7	130,940	53,880
Gabasni	3	16	124,750	66,696
Nara	2	7	87,000	43,457
Baitgali	3	74	130,650	73,523
Nagrai	3	14	123,500	39,625
Total:	20	143	857,890	351,495

Source: TSPU/USAID, PESHAWAR; June 1990

³See also Table A-6, p. 60.

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Unfortunately, although forestry subsidies were useful in helping overcome local opposition to the project, the program was not properly conceived to achieve sustainability. Programs did not succeed because the top-down approach employed did not give the recipients a vested interest in its success. The land owners on whose property the trees were planted like the program, but their main interest appears to be the monthly caretaker payments which they viewed as an inducement not to grow opium. The land owners' tenants, who actually planted the trees, considered this work as "begaar," or work without payment, so took little care with their planting efforts.

Constraints to the previous and current afforestation programs include the selection of sites based on political considerations, lack of sufficient professional foresters, improperly planted nursery seedlings and lack of adequate supervision by forestry department field staff. Also, the Department of Forestry is the only line agency in the project area whose personnel do not receive supplemental financial incentives in addition to normal salary.

From discussions with villagers, it was learned that they resent the few individual land owners receiving all the benefits of the afforestation programs. They expressed a desire to be provided the opportunity to organize themselves and to participate in village based social forestry programs which would provide a sustainable source of fuelwood and fodder. Such a program would also help preserve remaining natural forests.

No effective action has been taken to improve the quality and quantity of existing rangeland for forage grazing as part of any of the afforestation efforts.

d. Orchards

Fruit tree culture is a new venture in the project area established on about 1,000 acres of land belonging to 1,225 area growers. The tree plantings were laid out on farms ranging from 0.5 acre to 3 acres owned by the beneficiaries. Growers were paid 750 rupees per month for 36 months to pay the salary of orchard guards/watchmen. In 1987, 246 orchards were established, another 626 in 1988, and 353 in 1989.⁴

The main constraint to fruit tree culture is that it requires a reliable year round source of water. Fruit trees planted on the marginal soils in the project area require expanded spacing to provide a sufficient reservoir of soil moisture. Under these conditions, trees do not attain their maximum growth potential and yields are reduced. As a result of the wide spacing, however, it is possible to continue intercropping (wheat and maize) provided sufficient moisture and nutrients is available for both crops.

Another natural phenomenon associated with fruit tree culture is that there are periods (e.g., one out of five years) when they do not bear fruit. Thus incomes from fruit trees will not be consistent. At present, the fruit trees are not mature enough to bear fruit.

⁴See Table A-7, p. 57.

Other problems include improper and inadequate land levelling cultural practices including weeding, pruning, fertilizing and the proper use of insecticides.

e. Model Farms

As defined by the project, a model farm is a diversified cropping system on two to three irrigated acres including staple food crops (wheat and maize), a variety of vegetable crops and tree fruits. In the lowland areas model farms are irrigated from dug wells and in the highlands from mountain springs fed by irrigation channels.

In order to correctly implement model farms, in the initial stage of development a farm management plan should be established to include a proper layout and spacing of fruit trees and a recommended rotation of cash and staple food crops. While this was not done a model farm plan of sorts was designed.

This model farm approach promoted the adoption of high yielding varieties of wheat and corn plus new or improved varieties of vegetables including onion, garlic, tomato, cauliflower, yellow gram, okra, squash, rape (an oil seed crop) and potato and fruit trees such as citrus, apricot, plum and apple.

The model farm approach has been implemented within the project as water resources are developed for these ventures. At this point in time, the yields for HYV staple food crops under this regime has proven successful. Since the inception of these model farms only 350 to 400 acres have been utilized for diversified crops on a total of 200 model farms.

The major constraint to expansion of the model farm concept as currently defined is lack of sufficient irrigable land. A second constraint is that most model farms have a relatively shallow soil profile. Intercropping leads to a competition for soil moisture and nutrients. If these two elements are not in sufficient supply, then yields will be reduced.

Model farms are not established in rainfed areas. The majority of the arable land in the project area is rainfed. The soils in the rainfed areas are predominantly shallow, and the land gradient is extremely steep causing considerable erosion problems. As a result of these land features, the area is heavily terraced for agricultural production. The labor intensive practice of rock-face terracing is the only major soil conservation method utilized.

Demonstration crop plots, on-farm trials of HYV staple food crops and different vegetable cash crops, were done throughout the project area. A total of 1,382 demonstration plots/research trials have been laid out from 1984 to 1989 on over 9,000 acres involving 7,500 beneficiaries. Those observed by the evaluation team were well marked with signs to indicate the nature of the trial. These demonstration/crop trials involved HYV of wheat, maize, oilseed crops including rapeseed and off-season vegetables, e.g., tomato, potato, onion, garlic and peas. The resulting effect of these trials and demonstrations is that a new cropping pattern has been developed in the farming system of the area and crop yields have been increased by 70 to 100%. Mungbeans, a drought tolerant crop grown

successfully in other areas of the region as both a food and animal feed crop, has only been grown on a limited basis in the project area.⁵

f. Livestock

The total livestock population of the area is estimated to be 120,000 to 150,000 animal units. The average number of animals by type per farm family (and use of the animal) is as follows: two cows (dairy), two calves, one ox (draft), two to three sheep or goats (milk), six to seven chickens (eggs, meat), one to two buffalo (dairy).

Present livestock population in the project area has already exceeded the carrying capacity of the grazing land. As a consequence, farmers limit their stock to the available range. Farmers feed animals with dry wheat chaff, maize stover and any available bread. Farmers derive income from sale of milk and meat from cows and poultry, wool from sheep, skins from sheep and cows and eggs from chickens. Total revenue from livestock averages approximately 300 rupees per month per family.

There is one veterinarian at Topi. An additional 18 stock assistants, seven inseminators, and 30 stock guards are assigned to the Gadoon-Amazai area. The salaries of the stock assistants and five of the inseminators are paid by the project. This staff provides livestock health services through 16 veterinary dispensaries in the project area. The veterinary officer spends three days a week visiting the dispensaries, thus taking seven weeks to visit all stations. All 16 stations are not fully operational.

Stock assistants receive only one year pre-service training at Mardan, but have had no follow-on or in-service training. This limited amount of training is neither adequate nor effective to prepare these individuals to dispense adequate animal husbandry and veterinary services.

Only limited livestock activities have been implemented. There has been no appreciable development of pasture or forage feed in the project area. Animals do not get proper balanced diet due to insufficient feed. There is no immunization outreach program. Farmers usually go to the veterinary service center only if they have a problem.

Two new types of livestock were introduced. An attempt to raise Red Sindhi bulls and cows for milk production was unsuccessful due to lack of proper feed. Fayoumi chickens (hens and cocks) were introduced successfully.

Due to budget constraints, the livestock program has insufficient medication and staff members do not have enough transportation.

A comprehensive Livestock and Range Management Report for the Gadoon-Amazai Area was prepared by Development Alternatives, Inc., in November 1984, but not implemented. The team has reviewed the report and found that it outlines many functional programs

⁵See Tables A-3 through A-5, pp. 57-59.

which could be implemented to enhance the impact of the livestock program in the Gadoon-Amazai area (James Clausen, 1984, See bibliography).

g. Marketing

No significant efforts have been made to secure marketing outlets for production of vegetables produced in the project area nor has a detailed marketing study been accomplished. Diversified farming of vegetable crops such as tomato, potato, onion, garlic and peas are produced under irrigated conditions on approximately 350-400 acres. It appears that most of these vegetable crops are consumed by the producers. What limited surplus is available is apparently marketed locally using the existing network of main and feeder road systems; however, it is anticipated that vegetable production, with the assistance of the extension service, will increase in irrigated areas.

As a result of this anticipated increase in vegetable production, main village areas will become market outlets. With communication limited by the lack of infrastructure, it appears that obtaining current prices from markets outside the project area is difficult.

h. Subsidies

The wheat/fertilizer, fruit tree and afforestation subsidy programs assisted in overcoming resistance of farmers to participation in the Gadoon-Amazai project. No recipient contribution was required in any of the programs. The wheat/fertilizer program provided free HYV wheat seed and fertilizer, with the amount of free inputs received directly proportional to the size of the farmer's field. In the case of fruit tree and forestry subsidy programs, farmers received free seedlings, were paid for planting them and received monthly payments for a guard/watchman to look after the newly planted trees.

Farmers were not always told at the outset how long the subsidies would continue. As a result, they came to expect them to continue indefinitely, i.e., a "welfare syndrome" has been created. A three year phase-out of subsidies which coincides with the PACD was announced by a Project Implementation Letter (PIL) issued by USAID on 10 January 1990.

3. Human Resource Development

The project sought to create a more productive non-agricultural manpower base within the project area. Training and job placement are implemented through the PCU with the assistance of the Overseas Pakistanis Foundation (OPF). A sizeable number of individuals have received training and many have been assisted to find jobs, although results fall short of both project targets and area needs.

a. Training Assistance

A total of about 2,200 persons from the project area have been trained and some 257 are under training in various technical trades at a variety of institutions within and outside NWFP. This indicates that about 45% of the project's target of 5,500 people will have received training by the seventh year of this 10 year program. The PCU training office has targeted 3,000 more to receive training during the next three years, which, if achieved, would reach about 95% of the target. Extrapolation from current training rates, however would indicate an outcome of about 1,000 persons trained or 60% of the target.

Trainees receive, in addition to tuition and fees, monthly stipends of Rs 750, which PCU and outside observers feel may be a major incentive for many participants to apply for training. While there is a strong interest among residents in employment opportunities at the Industrial Estate, most have found that their lack of training qualifies them for only entry-level positions. These do not pay well enough to offset the transportation and subsistence costs necessitated by relocation from their villages to the Industrial Estate in the lowlands. (See 'e' below).

Gandaf Union Council, near project headquarters, had the largest number of trainees (657 or 30% of the total number trained), while Nara, Nagrai, and Baitgali Union Councils, located in the most remote parts of the project area, had smaller numbers trained (from 5% to 12% of the total).

There is little evidence of efforts to coordinate project supported training opportunities. Although plans have been made to monitor the employment status of training graduates, There has been no regular monitoring of the quality of training received to ensure that it met the requirements of prospective employers.

Throughout the project area, in over a dozen village meetings with over 100 elders and farmers, and in separate meetings with approximately 75 project leaders and politicians, the team heard an overwhelming interest in the development of a polytechnic school within the project area. This suggests the high value that local residents place on education and training, particularly that with a technical focus.

b. Employment Assistance

A total of about 2,710 persons from the project area have found employment directly through the project, including 520 in government departments, 470 in the private sector, 185 abroad, 1,230 on a short term basis as caretakers for orchard and forest plots, and

305 under contract assignments with the PCU. The primary source of information on potential employment used by the project at the present appears to be perusal of newspaper help-wanted advertisements.

In 1986 the government initiated a program to provide employment in the Gulf States for area residents. Only 130 have found employment under this program, due to continuing difficulties in obtaining the necessary permission from the Bureau of Immigration and Overseas Employment. An additional 54 persons, however, obtained short-term assignments helping pilgrims during the 1988/89 Haj season.

c. Surveys for Training and Placement

The PCU training office and computer center plan to develop a data base of training costs and employment status of training graduates which will help monitor effectiveness and efficiency in producing graduates with marketable skills. As part of this initiative, a field survey of project trainees has just been completed to determine their employment status and evaluate results to date. The preliminary results of this survey indicate that of 2081 trainees, only 700 persons, or 1/3 of the total number trained under the project, currently hold regular jobs.

TABLE 6

PERSONS TRAINED/EMPLOYED BY UNION COUNCIL

S. No.	Name of Union Council	No. of Persons Trained	No. of Persons Employed
1.	2.	3.	4.
1.	Gandaf	637	242
2.	Kabgani	407	117
3.	Gabasni	282	76
4.	Ghanichatra	235	98
5.	Nagrai	253	71
6.	Baitgali	162	63
7.	Nara	105	43
Total =		2081	710

SOURCE: PCU Survey August 1990.

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d. The Overseas Pakistanis Foundation

The OPF is a nationwide non-profit organization that seeks job training and placement opportunities within Pakistan for area residents under a sub-contract with the project. While up to date figures are not available, it appears that OPF has trained 600 to 800 area residents at both OPF training centers and private institutes, OPF has also found jobs for 300 to 350 persons. In addition, the OPF assisted with placement of about 180 workers in jobs overseas.

Efforts to ensure that some measure of parity is maintained in placing job applicants from each of the area's seven Union Councils have been undertaken and appear to fall within reasonable limits.

Constraints to training and job placement by the OPF included:

1. Plans to build a technical training center at Gandaf were abandoned for lack of cooperation by local residents early in the project life.
2. Few candidates for training were put forward by the PCU.
3. Few applicants appeared at special recruiting interview sessions set up by OPF at Topi with local employers.
4. Communication links with PCU were poor. Telephone/telex/fax connections poor or non-existent. Lists of high school graduates in GA area were not available to allow more directed job recruiting.
5. There was a lack of clear designation of authority and responsibility between PCU/OPF/Gadoon Industrial Estate.

e. Linkages with the Industrial Estate

The PCU reports that about 500 residents of Gadoon-Amazai are now employed by industrial estate establishments out of a total of about 1,500 employed, which is well below the mandated 70%. Area residents, as noted, (see "a" above), also find it difficult to travel to and/or find appropriate accommodation in order to take advantage of the relatively few job opportunities which come to their attention.

Following a Project Review Board decision in 1989, recruitment for the Industrial Estate is currently being channeled from the Sarhad Development Authority (SDA), which controls the Estate, through the Deputy Commissioner (DC Swabi): Estate industries inform the DC of the number and type of additional employees they wish to recruit; the DC then informs the PCU which attempts to apportion the vacancies equally among the seven Union Councils.

It was recently decided that the SDA, in coordination with concerned government departments, should identify future job opportunities in the Industrial Estate and should arrange the required training for area residents, making use of existing training facilities. This arrangement is not yet functional.

1. . Construction Employment and On-The-Job Training

One of the most important training activities resulting from the project is totally unrelated to the training component of the project, and consists of on-the-job training provided by PCU/USAID technical staff to project leaders and community construction crews implementing local sub-projects. As such they have gained construction skills and some experience in design, planning, estimating and implementation.

The construction of a typical building or similar sub-project employs a project leader and about 10 skilled workers. Considering that more than 300 such sub-projects have been completed, as many as 3,000 persons might have acquired construction skills under the project, and several thousand more will do so over the remaining three years of the project. Interviews with a sample of about 40 project leaders suggest that many of the workers trained on-the-job now use their skills on other building projects, within and outside the project area. Perhaps one in twenty of the project leaders have gone on to become active as private contractors.

4. Non-Formal Education and Women

The fledgling NFE program has had to overcome stiff resistance from the male-dominated culture. The initial six NFE centers have been expanded to 28, teaching women the Koran, sewing, basic adult literacy and health/sanitation. There has been limited emphasis on introducing income generating activities, although women seem to be eager to learn money-earning skills. A measured approach to program expansion has been adopted which has successfully avoided a male backlash to changes to traditional male/female roles. Interviews with male leaders in 12 villages indicate a generally positive attitude. Criticism of NFE was generally found only where the program was not fully functional.

The project is constrained by difficulties in finding and training qualified staff who are willing to work in the project area and the need to avoid pressure from local political leaders. Although in some locations two teachers were assigned to the same village, several teachers were posted alone to remote villages. This situation is exacerbated by the lack of safe accommodation in Topi for women teachers in order for them to spend two work days per month meeting with supervisory staff and other teachers for problem sharing and solving, and in-service training.

It has been reported that some teachers have received insufficient training prior to being posted to the project area, and monitoring/supervision has been conducted only once every few months. It appears that the ability and interpersonal skills of the teachers play a major role in the degree of success of the education programs, with class attendance much higher in schools with well motivated and well trained teachers.

The NFE program lacks staff women with technical experience in health/nutrition and in agriculture. At present, only one Lady Health Visitor has had even basic health and nutrition training and none have any agricultural expertise. In spite of this, NFE Extended Immunization Programs (EIP) have been successful in Nara, Nagrai and Baitgali. A recent study of the needs and concerns of women has identified areas which activities need to be strengthened (AID, Peshawar, 1990).

Many potential areas of NFE activity have not yet been thoroughly explored including women operated tree nurseries, kitchen gardens, women livestock vaccinators/village livestock volunteers, courtyard trees and rearing silkworms.

The highly motivated program managers are rapidly gaining experience, but have had only limited contact with the NFE programs of other development projects, such as those currently operating in adjacent areas of Swabi under the Pak-German Integrated Rural Development Program.

One key question yet to be resolved is what agency will take over the NFE when the Gadoon-Amazai project ends. Explorations are underway but no conclusions have yet been reached.

5. Institutional Development and Beneficiary Participation

Early hostility to the project by area residents severely limited institutional development and beneficiary participation during the first three years of the project. During the past four years as communities came forward and infrastructure projects were implemented through local leaders, participation has increased markedly. This growth in members, however, has not been accompanied by a similar magnitude of community level institutional development and an equitable spread of benefits to all segments of the rural socio-economic system.

a. Union Councils and Project Committees

Union Councils are the basic institution of formally constituted representative local government at the community level. They consist of about 8-10 villages, are normally composed of one or more elected representatives from each village and of a government appointed Secretary, and have responsibility for small development activities.

Village institutions in the project area are rudimentary, often informal, and dominated by village leaders: the traditional *Jirga*, or council of elders, settles local disputes, makes representations to government agencies over local concerns, and enforces community decisions. Villages often contain a number of relatively autonomous communities or affinity groups, each of which has its own leaders and which share a common meeting place, the *Hujra*. A local *Jirga* usually includes representatives from each *Hujra*. A traditional self-help system, *Ashar*, brings villagers together to help with free labor for constructing or repairing the village mosque, building paths, and carrying out other community projects.

From its inception, the project sought broad-based beneficiary participation. The mechanism chosen for implementing this participation was primarily the Union Councils, which were to have responsibility for the selection and implementation of community sub-projects. Early in the project, however, it was found that Union Councils, due to the large area they covered and their limited capacity, would be inappropriate for undertaking the required large number of small sub-projects in each village and they have not been directly involved in the project.

The alternative mechanism that emerged for realistic implementation of sub-projects was to work at the village level, through village project leaders, some of whom were also Union Council members. Project leaders came forward with lists of sub-project demands from their villages or affinity groups, seeking approval and funding. Selection of sub-projects was done by the PCU Project Director, after examining them for technical feasibility, and considering geographic and population distribution and other factors. Many sub-projects proposed by communities were not feasible, and most benefitted only a few individuals or an extended family. Gradually, through discussions with PCU and USAID staff, proposals became more realistic and beneficiary participation expanded.

Sub-project design, estimation and supervision is done by PCU and USAID engineers. Implementation is carried out by the project leader and his committee, under an

agreement with the PCU stipulating the work to be performed, the completion time and estimated cost. Labor is hired generally from within the village, usually from the group proposing the project, and is paid standard daily rates. Land for a sub-project is normally donated by the project leader or beneficiaries. Payments for construction costs are made to the project leader under a fixed schedule: 25% in advance, 25% upon completion of each of the first two quarters of the project, 15% on completion of the third quarter, and a final payment of 10%, which includes profit and overhead, upon completion and approval by the PCU and USAID.

Most sub-projects implemented through project committees have been completed within budget and without undue delays. Community members have acquired construction skills, but due to low literacy levels they are not yet capable of planning new sub-projects. Local communities have not been very effective in maintaining small infrastructure schemes.

Discussions with a cross-section of villagers suggests widespread support for the projects undertaken but serious concern that the largest measure of benefits, in terms of jobs and fees paid, has gone to a relatively narrow proportion of the total population, frequently perceived to be those already relatively well off.

b. NWFP Planning and Management Capability

At the district, regional, and provincial level the project has worked through a variety of local government institutions including the Planning and Development Department of NWFP (P&D), the Special Development Unit (SDU) which oversees all poppy eradication area development efforts; and the Project Coordinating Unit (PCU) which manages the project on a day-to-day basis. Project Review Board and Project Coordinating Committees are used to integrate inputs from line agencies and approve larger sub-projects.

i. P&D, SDU. The Planning and Development Department of NWFP is responsible for coordinating: preparation of provincial annual development programs; foreign aid and technical assistance; and economic research and statistics. The Special Development Unit was established in 1984, under P&D, and its main function is to oversee implementation of development projects with an opium poppy eradication component. (Annex 5, Table A-8)

ii. Project Coordination Unit. The PCU for this project was established in 1983 and is based in Topi, just outside the project area. The PCU Director (a civil servant at the level of deputy commissioner) reports to the Director General of SDU and has the authority to approve sub-projects costing up to 500,000 rupees.

The Project Coordinating Committee consists of the district heads of all relevant line agencies within the project area and it is headed by the PCU Director. It provides coordination among implementing agencies, advises the PCU on operational matters. It approves all sub-projects costing from 500,000 to one million rupees. The Project Review Board operates at the provincial level, overseeing and providing overall policy

guidance to all NWFP area poppy eradication and development projects. Chaired by the Additional Chief Secretary for Planning and Development, and including the Secretaries of relevant line agencies, it regulates and guides project policy, and approves deviations from project specifics. The PRB approves all sub-projects budgeted at over 1 million rupees.

The PCU was established originally as a coordinating unit, with project implementation to be undertaken by line agencies. However, due to the limited interest and/or capacity of line agencies to undertake infrastructure activities in the project area and the political nature of all activities, the PCU has been providing project management and implementation services with the assistance of USAID technical staff. The Project Director heads administration, management information and monitoring, engineering, agriculture and forestry, education/training, job placement, and women's non-formal education departments. The USAID technical assistance staff is located within the PCU, but reports to USAID/Peshawar. The PRB approves sub-projects in excess of one million rupees.

The PCU has a staff of 411, of which about 300 come from the project area. Professional staff includes 12 engineers or sub-engineers, one agricultural specialist, 45 female instructors and teachers and four accountants or assistants. Most of the other 349 employees are clerical, field and support personnel.

The PCU engineering branch was started in 1985. Currently, the staff includes a senior engineer, four engineers, seven sub-engineers, nine construction inspectors, surveyors, draftsmen and other support personnel. PCU engineering staff prepare technical feasibility reports, surveys and estimates for community sub-projects; they also assist project committees with site layout, purchase of materials, and construction. (PCU engineers are not involved in road and electrification sub-projects, which are supervised directly by USAID engineers.)

The PCU computer unit at Topi services the Gadoon-Amazai and the Kala Dhaka projects. It is staffed by one systems analyst and one information systems manager, who is responsible for maintaining data bases. Data bases are now maintained on infrastructure sub-projects, agricultural and livestock programs, vocational training and employment of area residents, project payroll and accounting. A training course is planned for senior PCU officials on the use of computer data bases to enhance project management.

The PCU organization, with assistance from USAID, has developed an ability to plan and implement small projects. Problems faced by PCU staff include at least a 25% redundancy of staff, low pay, lack of job security (they are contract employees hired for the project), insufficient logistical support, and constant pressure by community leaders to approve projects.

iii. Line Agencies. The main line agencies involved in infrastructure development supported by the project are C&W and WAPDA. C&W has been responsible for implementation of road sub-projects and WAPDA for electrification. The Agriculture, Forestry, Education, and Health Departments collaborate in the implementation of

development activities in each of their specific areas. Line expenditures must be authorized by the departments involved.

The surveys, designs and estimates prepared by C&W (often referred to as technical proposals) have been inadequate. Designs are often not followed during construction. The C&W Central Design Office for the NWFP, located in Peshawar, is inadequately staffed and equipped. It has only one highway design engineer, several technicians, and two microcomputers. Road construction contracts are awarded on the basis of open competitive bidding. Supervision of construction has reportedly been weak, and construction progress often behind schedule. Maintenance budgets are based on a yardstick which usually provides for one gangman to maintain approximately one mile of road using manual tools (picks, shovels, wheelbarrows).

WAPDA, upon receiving a request to electrify an area, prepares estimates for materials and equipment and submits a proposal to PCU for approval. WAPDA usually supplies the materials and equipment, with installation done by contractors or by WAPDA's field staff. Supply of materials has often been slow.

After a village is electrified, WAPDA provides connections to houses and other facilities, which can take up to three months. Due to staff shortages, WAPDA does not inspect electrical installations periodically, but only repairs them following breakdowns.

The quality of construction in Gadoon-Amazai has been higher than in many other areas, due to USAID's rigorous inspections and requests that work not meeting specified standards be redone.

iv. Contracting Procedures. Contractors interested in road projects receive a set of bid documents and the priced bill of quantities from C&W, and bid a few percentage points above or below C&W's estimate. The lowest bidder is awarded the construction contract. Payments to contractors are made for quantities of work placed and accepted each month, using the contractual unit prices. Two systems have been used by USAID to reimburse C&W for road costs: Modified Fixed Amount Reimbursement (FAR) and Host Country Contracting (HCC).

Under the FAR system, USAID and C&W agree on a fixed cost for each mile of road, based on design quantities and construction contract unit prices (plus or minus a 15% allowance). Following completion of a one-mile or three-mile road length, USAID inspects it, and upon acceptance pays C&W the "fixed amount", subject to adjustments, if any. Under the HCC system, USAID reimburses C&W monthly for the actual payments made to contractors, after verifying the quantities placed.

The FAR system in concept requires less supervision by USAID. Given, however, the limited C&W resources for construction supervision, USAID's supervision has been required.

In theory, FAR shields USAID from large cost increases. Disagreements, however, between USAID and C&W and reimbursement delays have occurred when the quantities

placed have differed more than 15% from the design quantities. FAR can also encourage designers to overestimate costs, so that the "fixed amount" per mile is high enough to accommodate variations beyond 15%.

Under FAR, C&W makes large payments to contractors before being reimbursed by USAID. If C&W interim funding sources are inadequate, C&W slows payments to contractors, resulting in delays, as contractors stop work.

WAPDA is reimbursed under a FAR, based on cost of materials plus a 26% mark-up to cover installation costs and overhead. Since WAPDA has been receiving 100% of the entire estimated cost in advance, no problems have been noted with this system.

c. USAID Technical Assistance

The first USAID engineer was assigned to Topi in 1985, with more following in 1986 and 1987. At its 1987 peak, USAID's engineering staff included ten engineers and construction inspectors, and a survey team of eight. The team has now been reduced to one construction project manager, two civil engineers, one electrical engineer, one construction inspector and two systems analysts. USAID's survey team has been moved to the Kala-Dhaka project, where it is currently surveying the West Bank Access Road.

The responsibilities of USAID's engineering team include: assisting PCU and line agencies in the preparation of designs and estimates for sub-projects; reviewing sub-project proposals and recommending approval or rejection; monitoring construction progress and quality; verifying quantity measurements for road projects; conducting final inspections of completed sub-projects and preparing the documentation for final payment; managing the data base for monitoring project activities; preparing progress and other reports; and providing technical assistance and on-the-job training to PCU engineering staff, line agencies and communities.

USAID also provides agricultural and female non-formal education specialists and a project manager to coordinate inputs and support.

Constraints faced by USAID staff in Topi include inappropriate vehicles (pick-ups instead of four-wheel drive vehicles), lack of first aid kits and life jackets, and sub-standard or crowded offices.

Cumbersome bureaucratic and financial procedures, together with multiple supervisory and approval layers have reduced project efficiency, however, and contributed to the development of excessive dependency of the PCU and line agencies on USAID personnel and procedures.

Overall the engineering team can be credited, however, for having greatly facilitated the massive infrastructure development program of the past four years, while the agriculture and NFE support has had a positive impact on the development of both those programs.

6. Private Sector Development

While private sector development is not a specific project purpose one of the main goals outlined in the Project Paper is to integrate the Gadoon-Amazai area into the national economy. Such integration through the private sector was virtually nil prior to the project and is still in the embryonic stage, although it is expected to increase as the shock of the transition from a poppy-based to a diversified economy fades.

Economic integration has been advanced significantly by project support of infrastructure which has increased the opportunity for marketing agricultural production as well as for small shops selling agricultural inputs and equipment.

Male literacy is about 10% and female literacy significantly lower, perhaps about 2%. Project supported traditional and vocational education has played a major role as well by helping to overcome the lack of trained manpower in this isolated, agrarian society.

These efforts toward economic integration, particularly those aimed at the non-agricultural private sector, are particularly important as the average holding per person, at one quarter acre, is about as small as is practical. As the population of the area increases, a larger segment of the population will need to earn a living from off-farm private sector activities.

The Gadoon Industrial Estate, another private sector effort supported by the project, at present has 18 operational factories employing nearly 500 project area residents. Employment of area residents should increase in the future as more of them complete project supported vocational training courses. Employment opportunities will also be augmented as the Industrial Estate expands: there are an additional six factories ready for operation, 127 under construction and about 400 approved for construction.

Lack of appropriate sources of credit is an impediment to private sector development. Informal credit is said to be available to farmers who can borrow against their remaining opium stocks. In addition, the brotherhood system within sub-tribes allows the poor to borrow at no interest from the rich, but these loans involve political and social dependence of the loan recipient on his benefactor. Institutionalized credit from the bank at Bada Village in Gandaf Union Council is theoretically available at an interest of 14% per year, but these interest charges and complex application procedures deter most would-be area borrowers.

Other factors limiting private sector development include poor roads, no telephone system, incomplete electrification, exclusion of women from the economy, low income levels of area residents, and political factionalism within the area including influential people unduly controlling area activities.

An important private sector involvement has been the encouragement and support by the engineering component to Project Leaders and Project Committees as implementing mechanisms for a wide range of infrastructure developments. These groups have become de-facto small businesses operating under contracts from the project. However,

most groups are not sustainable. They are ill-equipped to enter the private sector without further training and/or experience.

Discussions with a sample of approximately 70 Project Leaders and/or Committee Members representing all seven Union Councils revealed that they had completed 58 projects and had 46 under construction, or an average of almost 3 projects per leader. Three of the Project Leaders (8%) had started businesses related to their work and they knew of an additional 31 other small businesses that had been started as an indirect result of the project.

In these discussions Project Leaders from six of the seven Union Councils indicated a strong need for more technical training for area residents, while those from five of the Councils strongly urged that the project help develop a polytechnic school in the hills to help develop skills for employment and business development. Project leaders from all Councils agreed that agro-business had the greatest promise of any private sector activity and requested help from the project through training, technical assistance and support for poultry, dairy, orchard, goat and fisheries operations.

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7. Integrated Rural Development Approach

From its conceptual inception as a poppy eradication effort, the project evolved into a comprehensive area development program that sought to develop a diversified agricultural and non-agricultural system within the Gadoon-Amazai area and later in Kala Dhaka.

The successful elimination of poppy production indeed demands an integrated approach to area development and the project has been correct in seeking to implement such an approach for several reasons:

- There is no single substitute for poppy. Replacement of poppy income demands a comprehensive improvement of the agricultural system together with the development of off-farm income generating opportunities.
- Agricultural improvements demand a systems approach that includes intercropping, irrigation, agro-forestry, livestock development, and infrastructure.
- Infrastructure improvements, including roads, electrification, schools, clinics, water supply and irrigation systems depend on technical support from line agencies in order to become operational, and be properly maintained and operational.
- Infrastructure improvements require ecological planning to prevent environmental degradation.

To achieve integrated development and spread the project's benefits to a wider segment of the area's population, the project has sought to tighten up sub-project selection criteria. Some of these criteria are:

- Roads should open an area for development and C&W should agree to maintain roads upon completion;
- Villages to be electrified should have at least 30 houses;
- Water supply systems should serve at least 20 households, with Public Health Engineering agreeing to maintain large systems and beneficiaries agreeing to maintain small ones;
- Irrigation channels and dug wells should benefit at least two households which should agree to operate and maintain them;
- Schools should be at least 1.5 km apart, with preference given to girl's schools;
- At least one health facility should be provided in each Union Council.

8. Other Development Projects

At the request of USAID and GOP this evaluation increased its scope to review other area development models in the NWFP which might provide a framework for the redirection of the project. These included Kalam Integrated Development Project, Malakand Social Forestry Project, PATA Irrigation Project, Malakand Fruit & Vegetable Development Project, and Pak-German Integrated Rural Development Program in Mardan. In addition, discussions were held with key persons of the Aga Khan Rural Support Program and the Sarhad Rural Sector Support Corporation, two non-government organizations that utilize proven methods of grass-roots village organization development.

Common features of these initiatives include:

- **Autonomy and flexibility in terms of planning, budget, and day-to-day decision-making.**
- **Leadership from a development oriented and trained professional and core staff with expertise in social organizing and income-generating aspects of agriculture, livestock, forestry, and small business/private sector development.**
- **Project headquarters within the project area to encourage close contact between-project and target population.**
- **A bottom-up approach and methodology for building self-reliant grass-roots village development organizations that can take on the responsibility for sustained development and are responsive to community needs.**

C. Kala Dhaka Activities

With Phase II the project expended its scope to include the neighboring quasi-tribal area of Kala Dhaka. This was planned in order to head off an anticipated shift of opium poppy production from Gadoon-Amazai into Kala Dhaka.

1. Progress to Date

After extended delays, the PCU project manager and the chief of the technical assistance team started the project in February 1990. An anthropologist/social scientist joined in April, two engineers arrived in June and an agricultural specialist was approved for posting in August. The USAID survey team previously based in Topi has been transferred to the project. The project office is located in Mansehra to the southeast of the project area. Office furniture was delivered in July; there is still no office equipment. One vehicle has been delivered, and two pickups have been loaned from a UN project through the efforts of the Special Development Unit. A PIL was prepared by PCU in June 1990, and it was anticipated that a further three more months would be required for the release of USAID funds to the project. There is no revolving fund, but one million Rupees were advanced to the project in July 1990 also with the intervention of the SDU, and drawing on the Gadoon-Amazai revolving fund.

During the first two years, the Kala Dhaka project will focus on data collection, design and construction of the West Bank Access Road, design of other sub-projects, repairs to existing water supply systems, and reforestation of about 1,500 acres. To date about 9 km of the 24 km long West Bank Access Road have been surveyed. Mapping of the project area in a scale 1:50,000 is in progress, using Survey of Pakistan maps. No other infrastructure design work has started.

The project's social scientist visited 26 villages to prepare socio-economic profiles and determine local needs. This survey will eventually cover most villages in the Kala Dhaka area and will provide a baseline for future planning. No provision has been made in the project for village/social organization staff.

About 60 acres of demonstration plots have been laid down/sown; 200 acres of new forests are scheduled to be planted by September or October, and an additional 300 acres in 1991.

2. Low/No Subsidy Approach

The high subsidy level approach used at Gadoon was justifiable under the unique social, political and economic conditions that prevailed there during the early 1980s. It was needed in order to gain access and cooperation in shifting from an economy based on opium to one based on legitimate crops. In Kala Dhaka the economy is not based significantly on opium production so no such extraordinary intervention appears warranted. To eliminate the current low level of opium production would not have a major socio-economic impact on the area.

3. Workshop Methodology

The two project workshops on Kala Dhaka attended by one of the evaluation team members in March 1990 appear to have been quite effective. They allowed persons related to the project, including GOP, NWFP Government, USAID, technical assistance team members and outside specialists from different disciplines to interact and exchange ideas and information as well as to clarify their roles. The workshop approach allowed this to take place more effectively and efficiently than would have been possible otherwise.

A similar workshop was utilized by the evaluation team to review findings with stakeholders involved with both Gadoon and Kala Dhaka, and to seek consensus on conclusions, recommendations, and a course of action.

D. Drug Abuse Prevention Resource Center

There is a very real need for the DAPRC program. The narcotics problem has been growing exponentially in Pakistan, from a very few addicts in 1980 to a total of 2.2 million in 1990 including over one million heroin addicts.

The DAPRC organization, while small and relatively untested, appears to be dynamic and committed. It is staffed by an able leader who has attracted a team of dedicated people who actively sought out this type of employment to address a serious national problem. This has not always been the case. There is evidence that earlier staff recruitment was affected by selection criteria which were not always related to professional qualifications. It appears that this outside intervention has decreased. Fund expenditures were also delayed by one year, but this difficulty has been overcome.

The five units of DAPRC (Documentation and Archives, Training and Outreach, Information Services, Materials and Audio-visual, Research and Evaluation) have implemented a number of innovative and creative programs to bring the message about narcotics to the people including video tapes in various local languages, printed materials, network development and training of trainers.

There are DAPRC trained people in the vicinity of the project area, including Peshawar, Swabi, Mardan and Abbotabad. There was, however, no evidence of this activity having been integrated into project locations as a means of supporting drug awareness of local residents. There was also no evidence of significant drug abuse by local residents at present. The changing socio-cultural conditions in the project area, however, indicate that drug problems could occur in the future as more of the population become wage laborers, a group which accounts for much of the drug addiction in Pakistan. This could develop as a problem particularly in relation to the employment and settlement around the new Industrial Estate and the growing cities of the lowlands.

VI
ANNEXES

**VOLUME II
APPENDICES/ANNEXES**

ANNEX 1

**WORKSHOP REPORT
NWFADP EVALUATION**

A workshop was conducted Sunday, 26 August in Peshawar, Pakistan. The purpose of this workshop was to discuss the results of the evaluation of the North West Frontier Province Area Development Project. A list of workshop participants is attached on pages 97-98.

The Goal of the workshop was to "Understand the Results of the Evaluation of the NWFADP". The Objectives were to: "Verify Team Findings", "Clarify Conclusions", "Review Recommendations", "Define Realistic Implications", and "Identify Future Steps".

The design for the workshop was changed 20 minutes before it began when the ACS and DG informed the facilitator that they would only be in attendance for one hour due to the arrival at noon of the Prime Minister. In actual fact they remained for three hours and waited until the last minute to leave and meet their boss.

Instead of the planned design it was an emerging design based on the participants who actually showed up. Therefore, no outline for the workshop is attached.

The Team Leader presented the Team Findings. Participants asked questions and discussion followed. Team Conclusions were presented and a similar process of questions and discussion was encouraged and actively took place. Then Team Recommendations were presented and clarified through questions.

Workshop participants were then divided into three discussion groups and asked to discuss the Team's Recommendations and the implications, concerns, issues, etc of each one. After considerable discussions each group reported back to the workshop participants on flipcharts their considerations. Listed below are the Team's Recommendations. These recommendations are listed in a much abbreviated form and the text of the report should be consulted for details. Following each Team recommendation is the consolidated recommendation(s) of workshop participants.

Code: T--(Team) W--(Workshop participants)

RECOMMENDATIONS:

- T Continue dialogue between AID, GOP, and Project staffs
- W Discussions should include the clients, begin immediately, and continue through the Project life
- T Continue and accelerate, if possible, the process of phase-out
- T 25% reduction of PCU and AID TA staffs during this year
- T 25% reduction of PCU and AID TA staffs during next year
- T Remainder of responsibilities to line agencies during years 2 and 3
- W An assessment of personnel needs should be conducted by the SDU within the next 2 months. This assessment should consider financial implications, political implications, abilities of line agencies to assume responsibilities, completion rate of sub projects already approved, and staff requirements for new directions. It is recommended that the agriculture and forestry activities of the PCU (140 persons) be transferred first, if PCU assessment supports this recommendation. It is realized that some employees of both PCU and AID TA will be without jobs and should be assisted in finding new employment. The hope is that PCU staffs can be reabsorbed from these line agencies from which secunded to the fullest extent possible.
- T Approve no new sub projects under current guidelines
- W Consensus agreement reached
- T Initiate integrated staff workshops and meetings in PCU
- W Consensus agreement reached
- T Develop integrated extension teams
- W Workshop consensus reached
- T Continue Kala Dhaka/Gadoon workshops and staff exchanges
- W Workshop consensus reached
- T Solve cash flow blockages between AID and Kala Dhaka and insure future flow through Project life
- W Funds reported by AID staff to be available by 15 September

- T** Institute low/no subsidies in Kala Dhaka
- W** Institute low subsidies only for village projects which have self help component, but need extra support to get off the ground or which are experimental in nature (new for the area); otherwise institute no subsidies
- T** Plan for expansion of DAPRC activities
- W** Participants did not feel adequately versed on this subject to make a recommendation, but did doubted the feasibility of this idea
- T** Phase out subsidies and protection payments
- W** Workshop consensus reached
- T** Initiate and support a process of self reliant development
- W** Any organization that will be come involved in this process should be able to continue it beyond PACD. Funds should be made available which can be used for the support of village based sub projects. These funds should be used for 1. actual sub project costs; 2. group formation costs; 3. maintenance of sub projects already completed or to be completed, e.g. small irrigation systems, dug wells, etc. (those sub projects not under the purvue of line agencies).
- T** Identify and/or develop and/or extend village development organizations (VDO's)
- W** Workshop consensus reached
- T** Provide staff training, methodologies, and resources to VDO'S
- W** Funds to do this should be provided from funds redirected from Project redirections.
- T** Approve projects with substantial self help contributions
- W** Workshop consensus reached
- T** Develop and implement maintenance programs
- W** Everyone, generally, agreed that the line agencies did not have the funds for proper maintenance and that their budgets would have to be increased in order to perform this added function, both with and for logistical and technical assistance support. It was agreed that village groups and/ or individuals are responsible for small sub projects (see beginning of this section) and that line agencies are responsible for roads, schools, basic health units, veterinary clinics, etc.
- T** Strengthen agriculture and social forestry activities

- W Everyone agreed, especially for social forestry programs designed, implemented, and maintained by village groups
- T Combine training and job placement activities and operations
- W Ultimately, the SDA should be the line agency assuming the responsibility
- T Expand technical assistance in new areas
- W TA should be provided for redirected projects--those with village organization involvement
- T Provide access to credit for both men and women
- W In some situations this would involve credit and in others this would involve village savings programs
- T Implement village level social forestry programs
- W See above
- T Reach consensus between AID and GOP on model for implementing village development
- W Realizing that this will be an evolving process this should be a continuing dialogue in order to strategize a long term solution. This dialogue should begin immediately and involve the recipients when appropriate after AID and GOP have reached initial agreement.
- T (1) Continue modified, streamlined PCU
- T (2) Expand IRDP/Mardan model
- T (3) Establish new NGO or expand mandate of SRSC
- T (4) Other models
- W Generally, everyone agreed that the model had to involve the input of the recipients after some research had been conducted by AID and GOP. One faction strongly advocated a clean break from the past with a new separate entity while others wanted to build on models or parts of models already in existence.

However, everyone agreed that a budget analysis should be done immediately in order to see how much is left to redirect. Also, everyone agreed that a pilot should be conducted on the new model that incorporates lessons learned

ADDITIONAL WORKSHOP RECOMMENDATIONS:

Once agriculture and orchard production increase market surveys should be conducted in order to assist the village groups in finding the best markets for their produce.

Kala Dhaka field staff should receive financial incentives like Gadoon-Amazai to overcome "institutional absenteeism" and gain maximum benefit from development project efforts.

Construction of roads in Kala Dhaka should be emphasized for area access and economic development.

Private sector development was not a project goal, but should be addressed as it is vital for sustainability.

WORKSHOP RESULTS:

At the conclusion of the workshop participants had reached consensus on the Team's Findings and Conclusions and had reached either consensus on the Team's Recommendations or had added recommendations of their own as listed above. They achieved buy in, but due to time constraints not ownership of the Evaluation Report and future steps.

The process of the workshop was invaluable for the open discussions that took place between AID and GOP. The benefits of this process will be seen in future work between the two governments. The discussions of the content of the Evaluation Report accomplished much to move the work forward, but the process of discussing this content will prove the greater benefit in the long run.

FINDINGS:

1. Poppy production has been virtually eliminated in the project area
2. The project area has been brought into the mainstream of the national economy.
 - a. A system of roads, irrigation canals, wells, water supplies, schools, health facilities, veterinary facilities, electrification has been put in place, but adequate maintenance systems are not in place to insure sustainability
 - b. Agricultural productivity has increased significantly and new crops have been introduced including fruit trees, but agricultural incomes are still below pre project levels
 - c. Over 2,000 residents have been trained and placed in new jobs, but the numbers are below target and fall short of local needs
 - d. Private sector has been stimulated by the infrastructure and by the subcontracting out to local leaders which has created jobs, a few new

contractors, and a new industrial estate, but there is no provision in the project for supporting private sector development and a need remains for additional training to keep these contractors and employees in sustainable positions

- e. Some local institutions have been strengthened, e.g. PCU, P&D/SDU, and local line agencies, but traditional village level institutions which are the most viable and are being strengthened and /or used for development
- f. Project provides the major inputs for rural development, but they are not integrated
- g. Project in Kala Dhaka has established a management team with socioeconomic expertise which has begun a planning process , but it is hampered by a lack of flow of funds and lack engineering expertise
- h. A drug abuse prevention resource center has been established with a small professional staff and facilities to produce materials, but it has very limited outreach and has been the victim of politics in the past
- i. Substantial array of direct and indirect subsidies, e.g. wheat seed, fertilizer, and cash for orchard, forest production and makework jobs, but it has lead to a dependent welfare syndrome inconsistent with self reliance
- j. Enforcement has been a major factor in eliminating poppy and initiating the development process
- k. Villages were found which were ready to embark on self help projects- including roads, forestry, and vocational education, but this potential was not being explored

CONCLUSIONS:

- 1. A combination of enforcement is necessary for successful elimination of poppy
- 2. The task of opening up the project area has been accomplished, access to the area has been achieved
- 3. The project purposes have largely achieved or will be achieved by the PACD
 - a. Continued subsidies and the approval of sub projects without village involvement are not justified
 - b. The sustainability of development activities is in jeopardy due to lack of linkages with line agencies and communities
- 4. Even with the completion of all projects now in the pipeline the project area will still lag behind the adjacent Swabi lowlands

RECOMMENDATIONS:

- 1. Initiate an immediate dialogue between AID, GOP, and project staff to implement recommendations
- 2. Continue and, if possible, accelerate the process of phase out
 - a. Assist 25% of the PCU and AID TA staffs to find employment elsewhere during this year
 - b. Phase out another 25% of the PCU and AID TA staffs during the next year

- c. Hand over the remainder of the responsibilities of the PCU and AID TA staffs to line agencies during years 2 & 3
 - d. Approve no new sub projects
 - e. Develop and implement maintenance and hand over programs with line agencies and communities
 - f. Strengthen agricultural and forestry activities with staff and farmer training and transportation
 - g. Combine training and job placement operations under a single professional, non political person responsible for developing strong votech programs for men and women, improving linkages with Industrial Estate, and outplacing PCU staff
 - h. Expand technical assistance to small contractors, entrepreneurs
 - i. Provide access to credit for private small businesses
 - j. Initiate integrated staff workshops and meetings in PCU
 - k. Develop integrated extension teams
 - l. Continue Kala Dhaka/Gadoon workshops and staff exchanges
 - m. Solve cash flow blockages between AID and KD
 - n. Institute no subsidies in Kala Dhaka
 - o. Plan for expansion of DAPRC activities, including training of trainers while carefully maintaining autonomy and flexibility
 - p. Improve job placement ratio of local residents with Industrial Estate
 - q. Phase out wheat subsidies, fertilizer subsidies, orchard and forest protection payments, and make work jobs
3. Initiate a process of self reliant development built on community organization and provide the necessary support
- a. Develop village organizations to mobilize and involve communities in self help activities
 - b. Provide the necessary staff, training, methodology, and resources to support the development of community development organizations
 - c. Approve projects designed and to be implemented by broadly based community groups offering substantial self help contributions
 - d. Implement community based social forestry programs to replant barrer hillsides and to start household and village orchards
 - e. Reach consensus between AID and GOP on the most appropriate model for implementing community development approach
 - (1) Continue with a modified and streamlined PCU
 - (2) Expand IRDP/Mardan model into Gadoon area
 - (3) Establish new NGO or expand mandate of SRSC into Gadoon
 - (4) Other models

ANNEX 2

SCOPE OF WORK

The proposed evaluation will be the second for this project. Implementation of project amendment activities, i.e., Kala Dhaka and DAPRC is just getting under way; therefore, the evaluation's focus will be on activities of the original three components of the project (Gadoon I, UNFDAC and the Industrial Estate). The UNFDAC component will be excluded as its management is presently in the process of arranging an evaluation independently. The evaluation will, however, explore progress and impediments to project implementation under the amendment (Gadoon II, Kala Dhaka and DAPRC) and provide recommendations to improve and expedite project implementation.

Specifically, the team will address the following critical issues:

1. Has the project achieved its purpose of changing the Gadoon- Amazai area economy from one based primarily on poppy cultivation to a diversified agricultural and non-agricultural system with strong ties to the national economy, which will facilitate and complement the GOP's enforcement effort with respect to poppy cultivation and narcotics production? (Vol. I, p. 11, Vol. II, pp. 1, 2)

2. Have the project's four major outputs been achieved as identified below?

- a. Provision of a core infrastructure system (Vol. I, p. 11ff, Vol. II, p. 2ff)

The Gadoon-Amazai core infrastructure systems of (i) roads; (ii) power, and (iii) water will be in place in each of these areas, providing the necessary preconditions for the more rapid development of the area's economy and an increased level of government services.

- b. Impetus to a more rapid diversification of the area's agro-economy (Vol. I, p. 11ff, Vol. II, p. 9ff)

Activities will be undertaken to promote the diversification of the Gadoon-Amazai economy away from poppy production and income to other agricultural activities. This program will build on the existing base of non-poppy agricultural activity and will strengthen it by expanding production in areas that are not given much emphasis now (including horticulture, crop production and livestock).

- c. More productive manpower base (Vol. I, pp. 20-22, Vol. II, pp. 18-22)

The project will finance training and other programs to increase the productivity of the Gadoon-Amazai labor force, thereby increasing its ability to find jobs outside Gadoon-Amazai.

d. Strengthened planning and management capacity in NWFP government (Vol. I, pp. 25-26, Vol. II, pp. 23-24)

As a result of the project, the GONWFP will have increased capacity to design, implement, and evaluate broad-based development and enforcement programs to eliminate poppy production. At the provincial level the P&D will have increased capability in planning and implementing area development projects while, at the local level, the district and union councils in the project areas will have an upgraded capacity to select and implement small-scale development projects.

Accomplishment of the four major project outputs can be measured by the following indicators provided in the original project paper:

- 10,000 farmers assisted to increase agricultural production on their land (including crops, livestock, and tree products)
- 5,500 residents trained in marketable skills both outside and within the area
- 38 miles of engineered roads built
- 150 miles of paths and feeder roads built
- 375 acres of land irrigated
- 30 villages provided electricity with the potential of serving 48,000 residents
- 27 new potable water systems established and 28 existing systems repaired
- capability established within the area's seven union councils to develop and support three times as many small schemes as before project implementation
- staff capability and program content in major line agencies improved, e.g., agriculture, education, local government, so that the level and quality of services in Gadoon- Amazai equals that being provided at the time the PP was written in the lowlands (as measured by the services provided elsewhere in Swabi Tehsil)

The evaluation team will focus its investigation on the following questions in order of priority for each section. The sections have been developed based on project outputs as identified earlier. The evaluators must ensure that the report clearly distinguishes between their findings (the empirical evidence), their conclusions (interpretations of the evidence and judgment, based on the interpretation), and their recommendations (actionable and based on their judgement). Recommendations should be supported by empirical evidence and judgement based on the interpretation of the evidence.

A. PROVISION OF A CORE INFRASTRUCTURE SYSTEM
(Vol. I, pp. 11-13, 24-25; Vol. II, pp. 2-8, 24-27)

- a) Assess the PCU and line agency's (WAPDA and C&W) ability to design, implement and monitor large and small infrastructure activities. This will include their ability to operate and maintain activities, once completed.
- b) The previous evaluation stated that because of frequent PCU staff turnovers and the fact that little technical assistance was provided by the TA contractor, USAID engineers were required to provide technical assistance to the PCU engineers and in some cases perform the work themselves. To what extent have the line agencies and the PCU been able to provide the required technical assistance for infrastructure projects?
- c) Assess the adequacy and efficiency of USAID engineering technical assistance provided to the project.
- d) Assess the PCU and line agency's contracting procedures used for large and small infrastructure activities and provide recommendations to assure that contracting adheres to AID regulations.
- e) Assess the technical proposal capability of the C&W and determine if it has improved since the previous evaluation.
- f) Assess infrastructure activities completed on the Industrial Estate to determine the quality of work and assure it was completed to code.

B. DIVERSIFICATION OF THE AREA'S AGRO ECONOMY AND THE ADEQUACY AND EFFECTIVENESS INTERVENTIONS UTILIZED BY THE PROJECT TO ACHIEVE CROP SUBSTITUTION.

1. Union Council Approach:
(Vol. I, pp. 24-25; Vol. II, pp. 23, 24)

- a) Assess the adequacy and effectiveness of this approach in selecting, implementing and monitoring project activities, and provide recommendations to improve the intervention, taking into consideration the re-orientation of the project.
- b) Did the councils adequately represent the project beneficiaries as originally planned? If not, what can be done to change this?
- c) How did the union councils function, and what was the role of the PCU, the Coordinating Committee and the Project Review Board in project implementation?

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- d) Were the union councils responsive to the frequent changes in project objectives following the 1986 poppy eradication incident?
- e) Should project outputs be reformulated based on changes in these project objectives?
- f) Has the union council or PCU brought planned activities within available budget resources?
- g) Assess the integrated central planning intervention which utilized selection criteria for project identification and emphasized beneficiary participation. Provide recommendations to improve this approach, if appropriate.

2. SUBSIDY INTERVENTIONS AS A MEANS OF PROMOTING CROP SUBSTITUTION AND POPPY ERADICATION
(Vol. I, p. 19; Vol. II, p. 17)

- a) Assess the three year phase-out approach to subsidies and provide recommendations to prepare farmers for subsidy withdrawal.
- b) What interventions should be utilized to encourage government agreement to the phased-out approach?

3. PROPOSED INTEGRATED RURAL DEVELOPMENT APPROACH
(Vol. I, pp. 27-29; Vol. II, pp. 30, 31)

- a) Can the Gadoon approach of eliminating poppy production be readily replicated in an area (Kala Dhaka) which is outside the control of the central government?
- b) Are Gadoon and the new project area of Kala Dhaka conducive to the proposed integrated approach?
- c) Provide recommendations for implementation of an integrated approach to project implementation.
- d) What are the constraints to such an approach and how can they be eliminated?

4. INFRASTRUCTURE INTERVENTIONS
(Vol. I, pp. 11-13, 25ff, 32ff; Vol. II pp. 2-8, 24-27)

- a) In case of small schemes, are completed sub- projects operational? What mechanisms can be used to ensure beneficiary maintenance? In case of large schemes, have the completed schemes been handed over to their parent line department? Are the operational mechanisms in place?

- b) What additional irrigated acreage will be created by the completed irrigation channels and hand dug wells? What mechanisms can be used to ensure equitable use of the additional water and beneficiary maintenance of the facility?

5. AGRICULTURE INTERVENTIONS

(Vol. I, pp. 14-20; Vol. II, pp. 9-17)

- a) To what extent had the model farm approach been implemented through the project and, if utilized, how adequate and effective was it?
- b) Assess the extent to which Gadoon II has emphasized pasture/forage development and animal husbandry activities, and determine the adequacy and effectiveness of training provided to field staff in these technical areas.
- c) What has been accomplished to date to strengthen agriculture extension activities under Gadoon II?
- d) What has been accomplished in the assessment and promotion of new markets for new crops being produced through the project?

C. MORE PRODUCTIVE MANPOWER BASE

(Vol. I, pp. 20-24; Vol. II, pp. 18-22)

1. Training and Off-Farm Employment Interventions

- a) Assess the Overseas Pakistanis Foundation's (OPF) performance in providing training and job placement.
- b) Assess the continuing role of OPF in determining training requirements and the area's capability for employment absorption.
- c) Evaluate the training plan.
- d) To what extent have non-formal women's centers been effective at training women for income generating activities.
- e) What is the impact of the skills training program on the employment situation of area residents and what additional opportunities for off-farm employment can be promoted by Gadoon II?
- f) Assess the effectiveness of the PCU's training office which was established to: monitor OPF's activities, assure that off-farm employment targets are met, follow development of Industrial Estate and its training needs and complete a survey on available vocational training courses in the Province.

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- g) Assess the progress being made in Gadoon II regarding training and off-farm employment, agriculture training and women's centers.

D. STRENGTHENED PLANNING AND MANAGEMENT CAPABILITY IN GOVERNMENT OF NWFP

(Vol. I, pp. 11-13, 25-26; Vol. II, pp. 2-8, 23-27)

- a) Determine the extent to which line agencies can operate and maintain large and small infrastructure activities following their completion.
- b) Determine whether it appears feasible to complete approved sub-project activities prior to the project PACD.
- c) Assess the existing PCU's data collection, monitoring and analysis system and determine if it is providing the PCU, SDU and USAID required information to assist in the project management, decision making and monitoring requirements.
- d) Assess the validity of the data base and determine if data being provided is relevant.

E. PRIVATE SECTOR INVOLVEMENT

(Vol. I, p. 27; Vol. II, pp 28, 29)

- a) Assess the possibilities for expanded private sector involvement in agriculture, other off-farm industries and other possibilities.
- b) Identify constraints to further private sector development, i.e., manpower, technology, credit, government policy, etc.
- c) Suggest a possible program framework for private sector development activities within a three year time-frame.

F. KALA DHAKA ACTIVITIES

(Vol. I, pp. 29-31; Vol. II, pp. 32-33)

- a) Assess implementation progress to date of project activities including establishment of the PCU, design of roads, construction of the major West Bank access road; design of irrigation systems, village water supply, mapping exercises, the World Food Program/Forestry Department initiative, and other pilot activities which have been originated.
- b) Assess whether the size, organizational structure and location of the PCU are appropriate and adequate for it to effectively and efficiently perform its function.

- c) **Assess the project's no-subsidy (reduced subsidy) approach to curtailing the spread of poppy production, and provide recommendations as to whether this approach will be effective in eliminating poppy production in Kala Dhaka.**
- d) **Assess the effectiveness of the workshop methodology concept being developed for Kala Dhaka to bring the stakeholders, including the GOP, GONWFP, USAID and TA team onto one platform to regularly review their roles and exchange information.**
- e) **Review the nature and extent of new data obtained on the area and assess whether it provides a basis for improved analysis on the project area.**

G. DAPRC
(Vol. I, p. 31; Vol. II p. 34)

The Drug Abuse Prevention Resource Center (DAPRC) whose purpose is to provide an information base and awareness to drug problems in Pakistan, was provided \$165,000 start-up funds through the Regional Narcotics Education Project. Utilizing the start-up funds, the center is supposed to develop work plans and identify specific targets. The PC-1 has not been approved and because of frequent changes in personnel, there has been little continuity and progress has been slow.

- a) **Assess the effectiveness of the Pakistan Narcotics Control Board (PNCB) in administering DAPRC.**
- b) **Identify the problems associated with the slow implementation of the activity including the approval of the PC-1 by the GOP. What can be done to expedite implementation?**

**ANNEX 3
PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK 1983-1988**

Title of Project:
From FY 1983 to FY 1988
Total U.S. Funding \$20 million
Date Prepared: June 30, 1983

Project Title and Number: Gadoon-Amazai Area Development Project (391-0485)

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <p>Eradication of opium poppy production within a process of rapid socioeconomic development in the remote areas of Pakistan.</p>	<p>Measures of Goal Achievement:</p> <p>Poppy acreage in Pakistan reduced by one half by end of project without serious economic hardship in areas now dependent on poppy income.</p>	<p>Embassy and GOP estimates</p>	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"> 1. Area outside of project area do not increase opium production substantially as production eradicated in project area. 2. GOP able to provide sufficient assistance to achieve economic transition in other areas. 3. Economic alternatives providing satisfactory income base exist and can be applied in both project and non-project areas.
<p>Project Purpose:</p> <p>To change the economy of the Gadoon-Amazai area from one based primarily on poppy cultivation to a diversified agricultural and non-agricultural system with strong ties to the national economy, which will facilitate and complement the GOP's enforcement effort with respect to poppy cultivation and narcotics production.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <p>Elimination of poppy production in the project area and existence of an area economy that provides residents a standard of living comparable to present levels.</p>	<p>Embassy and GOP estimates. Results of project evaluation</p>	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> 1. Proposed economic alternatives prove to be applicable to project area in practice. 2. Opium price remains below Rs. 1000 during transition period. 3. Enforcement program implemented as agreed.
<p>Outputs:</p> <ol style="list-style-type: none"> 1. Provision of a core infrastructure system (roads, power, and domestic water). 2. Impetus to more rapid diversification of the area agro-economy, including crops, horticulture, tree production, and livestock. 3. More productive manpower... trained in construction trades and able to find employment outside the area. 4. Strengthened planning and management capacity in NWFP Government. 	<p>Magnitude of Outputs:</p> <ol style="list-style-type: none"> 1a. 13 miles of engineered road b. 150 miles of paths and feeder roads c. 30 villages reached by power lines d. 27 new potable water systems, 26 systems repaired. 2a. 10,000 farmers assisted to increase alternative production b. 375 acres irrigated 3a. 3500 residents trained in marketable skills b. 10 new schools built and 35 repaired 4a. 7 union councils able to triple number of schemes managed per year b. Staff and program content in area equivalent to that in lowland NWFP. 	<p>Project and A/O records Project evaluations</p>	<p>Assumptions for achieving outputs:</p> <ol style="list-style-type: none"> 1. Line agencies cooperate in program. 2. PCO effective in coordinating inputs from different sources. 3. Program not disrupted by failure to enforce or by noncooperation of area residents. 4. Roads completed in timely manner, permitting access to other areas. 5. Sufficient technically appropriate sites found for agricultural program and irrigation expansion. 6. Area residents cooperate with program and agree to participate in activities.
<p>Inputs:</p> <p>Technical assistance and other personal services Commodities Operations (including training) Construction GOP staff, facilities and on-going programs</p>	<p>Implementation Target (Type and Quantity)</p> <p>Personnel: \$ 1.00 million Commodities: \$ 0.84 million Construction: \$ 0.40 million Operations: \$ 2.97 million Infl Cost: \$ 6.04 million GOP Inputs: \$ 5.16 million (equip.) TOTAL \$25.36 million</p>	<p>Project and AID records Project evaluations</p>	<p>Assumptions for providing inputs:</p> <ol style="list-style-type: none"> 1. Necessary contracts completed in timely manner. 2. Facilities available for project use as planned. 3. Commodities and training services made available through other AID projects as planned. 4. Personnel contractor able to find qualified Pakistani personnel as needed. 5. Seeds, planting material, and improved livestock available where needed.

LOGICAL FRAMEWORK

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <ol style="list-style-type: none"> 1. Eradication of opium poppy production within a process of rapid socioeconomic development in the remote parts of Pakistan. 2. Elimination of drug abuse in Pakistan. <p>A-1</p>	<p>Measures of Goal Achievement:</p> <ol style="list-style-type: none"> 1. Poppy cultivation eliminated in all settled areas by 1983 without serious economic hardship in areas now dependent on poppy income. 2. Pakistan's addict population reduced by at least 15% by 1993. <p>A-2</p>	<ol style="list-style-type: none"> 1. Embassy and GOP estimates 2. PNCB and Embassy estimates <p>A-3</p>	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"> 1.a. GOP continues its commitment to the eradication plan. 1.b. Once the ban is enforced in Buner, Gadoon-Amazal and Kala Dhaka, poppy cultivators will be unable to find suitable settled areas in which poppy might be grown. 1.c. Price of opium does not increase significantly. <ol style="list-style-type: none"> 2. GOP continues its commitment to make Pakistan a drug free nation. <p>A-4</p>
<p>Project Purpose:</p> <ol style="list-style-type: none"> 1.a. To change the economy of Gadoon-Amazal from one based primarily on poppy to a diversified agricultural and non-agricultural system with strong ties to the national economy. 1.b. To halt poppy production in Kala Dhaka by bringing this remote area into the mainstream of provincial and national development. <ol style="list-style-type: none"> 2. To support local, provincial and national efforts to achieve a drug free society through reduction of drug demand and drug production. <p>B-1</p>	<p>Conditions that will indicate purpose have been achieved.</p> <p>End of Project Status.</p> <ol style="list-style-type: none"> 1. Poppy area residents maintain a standard of living comparable to pre-project levels. 2. Industrial Estate fully leased and plants in operation. 3. All weather road networks established that effectively cover the two areas and link them to other regions. 4. Ag marketing systems established for non-traditional crops from the area. <p>Drug Abuse Prevention Resource Center fully functional and receiving 100% of its support from GOP.</p> <p>B-2</p>	<p>Embassy and GOP estimates</p> <p>Mid-term and EOP evaluation</p> <p>Results of GOP evaluation and GOP records.</p> <p>B-3</p>	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> 1.a. Poppy ban in Gadoon-Amazal continued by GOP; area residents continue to accept project benefits and comply with the ban. 1.b. Kala Dhaka residents accept project benefits; GOP enforces poppy ban once benefits flowing, o/a Year 3 of amendment. <ol style="list-style-type: none"> 2. Local, provincial and national groups will make full use of the Drug Center facilities; the socio-political environment will permit these groups to function easily. <p>B-4</p>

LOGICAL FRAMEWORK

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Output: (For list of outputs and their magnitudes, please see Section III.B, of the Project Amendment).</p>	<p>Magnitude of Outputs:</p>	<p>1. Project and AID records Project Evaluations</p>	<p>Assumptions for achieving outputs: 1.a. Line agencies continue to cooperate; PCU continues to coordinate inputs; area residents continue to cooperate. 1.b. Kala Dhaka tribal leaders accept involvement of Government officials and technical assistance team; GONWFT provides PCU leader of appropriate qualifications; area residents participate in project activities. 2. Other donors and GOP make inputs in timely fashion.</p>
C-1	C-2	C-3	C-4
<p>Inputs: Technical Assistance and other personnel Commodities Operations (including training) Construction GOP staff facilities, and on-going programs Other donor inputs (Drug Center only)</p>	<p>Implementation Target (Type and Quantity): (For list of proposed inputs, please see Section V.E. Financial Analysts)</p>	<p>Project and AID records Project Evaluations PNCB Reports</p>	<p>Assumptions for providing inputs: 1. Necessary contracts completed on time. 2. Facilities available for project use as planned. 3. Qualified personnel in US and Pakistan are available to the project. 4. Commodities will be available when needed. 5. Project funding provided as scheduled.</p>
D-1	D-2	D-3	D-4

ANNEX 4 EVALUATION METHODOLOGY

The purpose of this study is to measure the effectiveness of the NWFADP in terms of meeting its goals and objectives, to evaluate the interventions of Phase I and the first half of Phase II of the Gadoon-Amazai component and provide recommendations for the remainder of Phase II, and to evaluate the start-up of the Kala Dhaka component and provide recommendations for its continuation.

To review activities on agriculture, infrastructure, and institutional development field visits were made by the evaluation team members, operating in three small groups together with PCU and USAID project staff, to all seven Union Councils, 22 villages, and approximately 90 sub-projects. All main metalled and shingled roads were covered and two parts of Baitgall UC were crossed by foot. Two boat trips on Tarbela Lake/Indus River provided exposure to portions of Kala Dhaka, including visits to two villages and visual inspection of five others.

Meetings were held with PCU/USAID staff, approximately 100 village leaders and farmers, officials of P&D, SDU, Local Government, Agriculture, Forestry, Irrigation, C&W, and Public Health Engineering Departments, Peshawar District Administration, Agriculture University, WAPDA, and Industrial Estate, and Kala Dhaka PCU/TA staff. Project reports, correspondence, and other relevant documents were reviewed.

At the suggestion of USAID and GOP, the scope of work was expanded to review other development projects in the NWFP which might serve as possible models for the project's reorientation. For this purpose field visits were made to Kalam Integrated Development Project, Malakand Social Forestry Project, PATA Groundwater Irrigation Project, Malakand Fruit & Vegetable Development Project, and the Pak-German Integrated Rural Development Programme Mardan. Discussions were also held with knowledgeable parties associated with the Aga Khan Rural Support Program and the Sarhad Rural Sector Support Corporation.

At the conclusion of the evaluation process a facilitated workshop was conducted with all significant officials of both the GOP and USAID. The participants verified the Team's findings, clarified conclusions, reviewed recommendations, defined realistic implications, and identified future steps.

The Evaluation Schedule:

July 12, 1990	Team Leader arrives for 5 days of orientation, document review, and site visits
July 17	Economist, Agronomist, and Engineer arrive
Week 1	Orientation, Documentary Research, Planning; GOP Team Member Joins Mission
Week 2	Field Visits, Interviews
Week 3	Sub-Project Inspections, Village Meetings
Week 4	Visits to Other Development Projects; Further Research; GOP Interviews
Week 5	Report Writing - First Draft - Workshop Facilitator Arrives
Week 6	Workshop - Second Draft Report to GOP
Week 7	Agronomist, Engineer, GOP Team Member Depart -Team Leader, Economist, Workshop Facilitator Prepare Final Draft Report to AID/Pakistan - Depart
Weeks 8-10	Washington, DC: Team Leader, Workshop Facilitator, and LBII Staff Finalize Report

ANNEX 5
DATA TABLES

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TABLE A-1

DISTRIBUTION OF LAND AND POPULATION IN GADOON AMAZAI

Sub Area	Total Land Acres	Cultivated Land Acres	Population	Cultivated Land per Person in Acres
Gadoon	68,000	16,000	65,000	0.25
H. Amazai	44,000	8,000	28,000	0.28
S. Amazai	26,000	6,000	23,000	0.26
TOTAL	138,000	30,000	116,000	0.26

LAND OWNERSHIP PATTERN IN GADOON

Size of Holding (Acres)	Number of Owners	Percent Total Owners	Total Land (Acres)	Percent Total Land	Total Cultivated Land (Acres)	Percent Cultivated Land	Average Total Land per Holding (Acres)	Average Cultivated per Holding (Acres)
up to 0-5	16676	89.6	28365	49.8	8997	56.4	1.70	0.54
5-25	1719	9.2	20241	35.5	5235	32.8	11.78	3.05
25 +	205	1.2	8360	14.7	1735	10.8	40.78	8.45
Total	18600	100	56966*	100	15967	100	3.06	0.86

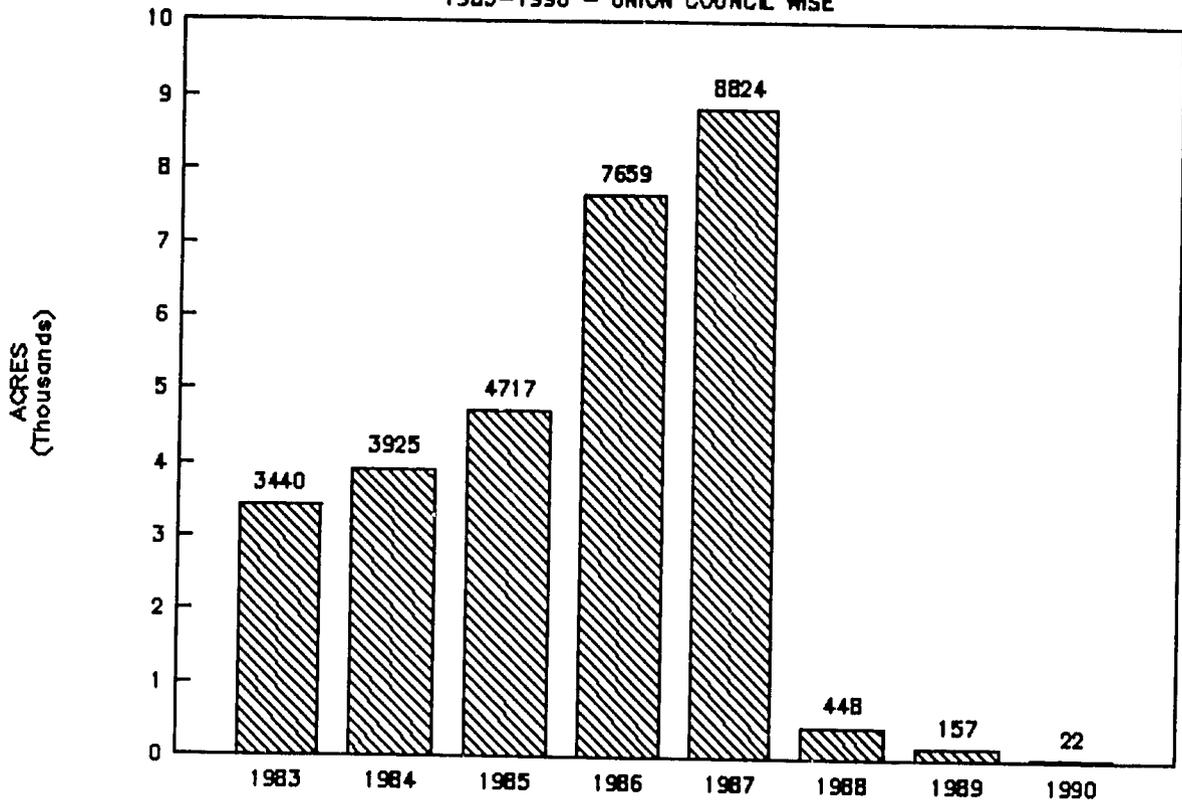
* Does not include 11,000 acres of Land held communally by certain villages.

Source: Land Revenue Records.

TABLE A-2

NWFADP/OPIUM CROPPED AREA

1983-1990 - UNION COUNCIL WISE



SOURCE: PCU/USAID; GOP Revenue Department, Swabi, Abbotabad, and Swat.

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TABLE A-3**CROP DEMONSTRATION/TRIALS
1983 THROUGH 1989**

Union Council	Demonstration/ Trials-Nos	Acres	Beneficiaries
Gandaf	201	1075	1061
Kabgani	352	2575	1854
Ganichatra	82	653	571
Gabasni	92	555	508
Baitgalli	113	685	750
Nara	106	428	523
Nagrai	436	3098	2184
<hr/>			
Total	1382	9069	7451
<hr/>			

Note: Demonstration/Crop trials included high yielding varieties (HYV) of wheat, maize (corn), sunflower, soybean, barley, gram, sesame, peanut, rape seed, mungbeans and off-season vegetables like potato, tomato, onion, garlic and peas. The resulting effect of these trials/demonstrations is that a new cropping pattern has been developed in the farming system of the area and crop yields increased by 70-100 percent. Still a considerable mileage has to be covered in order to make these opium crop replacement interventions sustainable and more economical for the farmers.

Source: PCU/USAID

TABLE A-4

CROP DEMONSTRATION PROGRAMS
1983 THROUGH 1989

YEAR	1983		1984		1985		1986		1987		1988		1989		TOTAL	
	F	A	F	A	F	A	F	A	F	A	F	A	F	A	F	A
WHEAT	1012	538	1289	796	859	889	-	-	-	-	-	-	-	-	3160	2223
MAIZE	-	-	373	167	401	232	419	416	275	1900	651	1877	657	1022	2986	5614
SUNFLOWER	-	-	55	21	7	3	-	-	-	-	-	-	-	-	62	24
POTATO	-	-	41	7	162	27	107	16	-	-	-	-	-	-	310	50
PEANUT	-	-	101	22	12	5	1	1	-	-	-	-	-	-	114	28
SESAME	-	-	3	0.5	-	-	-	-	-	-	-	-	-	-	3	0.5
RAPESEED	-	-	24	8	60	81	9	11	14	70	47	94	-	-	154	264
PEAS	-	-	-	-	29	8	15	6	6	30	40	80	-	-	90	124
TOMATO	-	-	123	30	60	25	-	-	26	52	40	80	88	176	337	363
GRAM	-	-	-	-	9	5	5	4	10	50	-	-	-	-	24	59
BARLEY	-	-	-	-	12	3	7	9	-	-	-	-	-	-	19	12
MUNGBEANS	-	-	-	-	12	8.5	-	-	106	214	-	-	-	-	118	222.5
ONION	-	-	-	-	25	4	20	50	-	-	11	22	-	-	56	76
SOYABEAN	-	-	-	-	18	9	-	-	-	-	-	-	-	-	18	9
TOTAL	1012	538	2009	1051.5	1666	1299.5	583	513	437	2316	999	2153	745	1198	7451	9069

F = FARMERS
A = ACRES

SOURCE: USAID, PERSHAWAR
AG DEPARTMENT
DATE: APRIL 30, 1990

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TABLE A-5

CROP DEMONSTRATION PROGRAMS
1983 THROUGH 1989

YEAR	1983		1984		1985		1986		1987		1988		1989		TOTAL	
	F	A	F	A	F	A	F	A	F	A	F	A	F	A	F	A
WHEAT	1012	538	1289	796	859	889	-	-	-	-	-	-	-	-	3160	2223
MAIZE	-	-	373	167	401	232	419	416	275	1900	861	1877	657	1022	2986	5614
SUNFLOWER	-	-	55	21	7	3	-	-	-	-	-	-	-	-	62	24
POTATO	-	-	41	7	162	27	107	16	-	-	-	-	-	-	310	50
PEANUT	-	-	101	22	12	5	1	1	-	-	-	-	-	-	114	28
SESSMUM	-	-	3	0.5	-	-	-	-	-	-	-	-	-	-	3	0.5
RAPESEED	-	-	24	8	60	81	9	11	14	70	47	94	-	-	154	264
PEAS	-	-	-	-	29	8	15	6	6	30	40	80	-	-	90	124
TOMATO	-	-	123	30	60	25	-	-	26	52	40	80	88	176	337	363
GRAM	-	-	-	-	9	5	5	4	10	50	-	-	-	-	24	59
BARLEY	-	-	-	-	12	3	7	9	-	-	-	-	-	-	19	12
MUNGBEANS	-	-	-	-	12	8.5	-	-	106	214	-	-	-	-	118	222.5
ONION	-	-	-	-	25	4	20	50	-	-	11	22	-	-	56	76
SOYABEAN	-	-	-	-	18	9	-	-	-	-	-	-	-	-	18	9
TOTAL	1012	538	2009	1051.5	1666	1299.5	583	513	437	2316	999	2153	745	1198	7451	9069

F = FARMERS
A = ACRES

SOURCE: USAID, PERSHAWAR
AG DEPARTMENT
DATE: APRIL 30, 1990

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TABLE A-6**FORESTRY PROGRAM
AS OF OCTOBER 1989**

Union Council	1987/88	
	Plots	Acres
Bait Gali	33	356.70
Ganichatra	31	287.80
Gandaf	100	891.40
Gabasni	63	658.50
Kabgani	50	590.60
Nara	29	226.00
Nagrai	54	643.00
Total	360	3654.00

Source: PCU/USAID

TABLE A-7

**FRUIT ORCHARDS & FORESTRY PROGRAMS
AS OF OCTOBER 1989**

UNION COUNCIL	FRUIT ORCHARDS YEAR WISE								FOREST PLOTS	
	1987		1988		1989		TOTAL		1987-88	
	ORCH- ARDS	ACRES	ORCH- ARDS	ACRES	ORCH- ARDS	ACRES	ORCH- ARDS	ACRES	PLOTS	ACRES
BAIT GALI	55	53.62	94	92.38	52	39.00	201	185.00	33	356.70
GANICHATRA	33	29.00	90	88.12	67	50.25	190	167.37	31	287.80
GANDAF	33	32.37	51	50.12	15	9.75	99	92.24	100	891.40
GABAASNI	58	55.00	121	117.70	51	0.48	230	173.18	63	658.50
KABGANI	13	12.75	63	63.25	62	40.50	138	116.50	50	590.60
NARA	0	0.00	126	125.00	57	42.75	183	167.75	29	226.00
NAGRAI	54	347.75	81	62.00	49	73.50	184	483.25	54	643.00
TOTAL:	246	530.49	626	598.57	353	256.2	1225	1385.2	360	3654

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TABLE A-8

**A PROFILE OF ON-GOING PROJECTS
COORDINATED BY SPECIAL DEVELOPMENT UNIT
PLANNING & DEVELOPMENT DEPARTMENT, NWFP**

NAME OF PROJECT	AREA IN SQ. KM.	POPULATION	PERIOD	DONOR AGENCY	COST GOP	F/A	EXPENDITURE (MARCH 90)		TOTAL	STATUS	
							TOTAL (Rs IN MILLION)	F/A			
1. Gadoon Amazai Area Development Project	515	116,000	1984-93	USAID/GOP 40.90m	42.01	707.2	749.21	17.50	379.62	379.12*	Computed value of existing Government services. Phases I and II combined.
2. Dir District Dev. Project.	5282	767,500	1985-91	UNFDAC \$20.0m	27.4	283.0	310.4	6.224	141.35	147.574*	On-going **Donor Countries are USA, UK, Canada, Italy, Netherlands, etc. *TA expenditure not included.
3. Malakand Agri & Area Dev. Project			1981-90	NAU/USG \$2.35m		36.43	36.43		20.36	20.36	On-going
i. Agriculture Outr-reach program (Malkand, Bajaur, Mohmand, & Kala Dhaka)											
ii. Malakand Agency Dev. Project	952	300,000	1982-90	NAU/USG \$6.35m		104.20	104.20	84.427	84.427		On-going
iii. Adenzai, Dev. Project, Dir Dist.			1984-90	NAU/USG \$1.00m		18.27	18.27	12.156	12.156		On-going

NAME OF PROJECT	AREA IN SQ. KM.	POPULATION	PERIOD	DONOR AGENCY	COST GOP	F/A	TOTAL (Rs IN MILLION)	EXPENDITURE (MARCH 90) GOP	F/A	TOTAL	STATUS
4. Bajaur Agency Project	1500	360,000	1989-93	NAU \$12.5m	26.14	230	256.14		9.729	9.729	NAU has advanced Rs. 22 million out of approved cost of Rs. 48.50 million allotment for 89 is Rs.
5. Mohmand Agency Project	2296	195,800	1989-93	NAU \$12.5m	30	230	264.80		7.890	7.890	NAU has released Rs. million out approved Rs. 48.5 million for
6. Kala Dhaka Area Dev. Project	1000	83,927	1989-93	USAID \$26.5m		677.26	677.26	Not Yet Started			Approved by ECNF on 21/12/89
7. Buner Area Dev. Project	1740	256,000	1988-91	EEC \$12.7m	92.95	206.3	299.23	2.330	1.506	3.836	On-going
8. Chitral Area Dev. Project	14850	243,000	1988-95	IFAD/ADB \$39.1m	101.2	600.1	701.3	17.16	8.25	25.41	On-going

ANNEX 6

VILLAGE FOCUS GROUP INTERVIEWS

Village Leaders Focus Group Interview

Village/Location: Malakabad, Kabgani UC
No./Composition of Group: 2 Elders, brothers

Date: 7/25/90

The discussion took place under a large tree next to a well that they had dug in 1958 and within sight of their 2 tractors and 12 kanal orchard from which they used to produce 40 kg of liquid (10 kg dry) opium worth between 500 and 2000 Rs. worth a maximum of Rs. 20000. They have a total of 120 kanals of land, which they planted with rainfed wheat in '89, yielding 160 mds. of grain--@ Rs. 100-120/md.--worth Rs. 16-20,000, plus straw worth Rs. 4500. In addition their orchard produces fruit for home/family use that could be worth another Rs.6-7000.

Among the first cooperating farmers in the Gadoon area, and first in Malakabad, they undertook orchard development, receiving trees, technical advice, and a "watch & ward" allowances of Rs. 1500/mo. or Rs. 18,000 a year (bringing their total income to about Rs. 50-70,000/ yr.

In their view the best projects have been the dug wells and orchards, the latter, of course, because of the stipends... plus the fruit, the former because of their irrigation value, especially for tobacco. Years ago they had expected an irrigation channel from Tarbela Dam, but it never materialized, so they welcomed dug wells in the village, owned by individuals but shared with others on a costs shared on the basis of proportion of land irrigated. Vegetables have done particularly well.

The least beneficial project has been electricity because small holders can't afford to hook up and face Rs. 900-1000/mo. Schools haven't been particularly successful either. They do nothing for local incomes, although it does mean that kids don't have to be sent outside. The High School isn't opened yet, and the Middle School is poorly staffed and supervised. Teacher training is poor.

Regarding the village women, they appreciate the NFE program, especially that the young girls are learning needlework and it reduces the quarrels among the women. They'd like a Lady Health Visitor to provide injections and need a lady doctor, too. There are compounders in the village, but they are limited in what they can do...plus they cost money. To get good health care--for hemorrhaging, TB, Cancer, shaking, they have to take their women to Mardan or Peshawar, usually to private doctors, because they can't get good medicine at the Gvt. Hosps. This costs Rs. 200 a visit. Trained midwives get Rs. 300 per birth and the private dispenser/compounder charges Rs. 50 a visit.

Village Leaders Focus Group Interview

Village/Location: **Ganichatra**

Date: 7/25/90

No./Composition of Group:

3 Elders/Mbrs of Jirga, incl.
brother of Union Council Chmn.

Sitting in the partially completed residential quarters for the new Integrated Rural Health Ctr. (Upgraded from Basic Health Unit), we talked about the activities and priorities of the village. They explained that the fundamental institution in the village is the Jirga, a council of elders appointed by the villagers.

Traditionally the Jirga handles local disputes but in recent years they have made a number of collective representations on development issues, including one 3 mos. ago to the PD and DC for what they consider the area's top priority:

- A polytechnic college, for which they are prepared to donate 16 kanals of land plus 20 man-months local labor organized by the Jirga

They have selected a central site in the district, above the road near Ganichatra, in response to what they consider to be a Gvt. promise that such a college will be approved. Why such interest in a Polytechnic? Because they see the major problem in the area to be lack of employment opportunities outside agriculture. Young people need technical skills to go out to Gadoon Indust'l Estate, Peshawar, Lahore, Karachi, and the Gulf States to earn money.

Self-help seems reasonably well-established in the Village as evidenced by their purchase of the first primary school building, construction of a fine local mosque which they showed off to us with pride, and their offer to contribute land and labor for a Polytechnic. Follow-up conversations with a gathering of local farmers and with the Amam of the Mosque confirmed strong support for a self-help Polytechnic project, the Amam even offering to persuade those helping finish the mosque to turn their attention to the education needs in the community.

Other priorities mentioned by the leadership focused on education and forestry:

- New primary school building--existing building bought for Rs. 1500 by the village from locally raised funds--is inadequate
- Upgrade Middle School to High School
- Forest and grazing management to provide better fodder for their cattle and both fuel and construction wood for the village
- %NFE center like the one in Utlia for the women

The road has radically changed access and enterprise in Ganichatra. Leaders proudly showed off the business cards of the many visitor who have come to the village over the years, including Richard Smith (IRDP Markaz, Topi), Jimmie Stone (Dep. Dir. AID Islamabad), Douglas Olin (Committee on Budget, US Senate), Robert Butler (USIS TV). Along the road about half a dozen new businesses have opened their doors, serving

passing travelers. Significant amounts of locally purchased fertilizer were observed to be changing hands at one of these shops, suggesting that some local farmers have begun adopting improved agricultural practices on their own without subsidies.

A follow-up discussion turned to the income producing issues of agriculture and forestry. Leaders indicated that they are negotiating locally to see if the gvt. will provide fencing wire to be installed by local farmers under a proposed 10 yr. agreement that would commit 200 kanals (25 acres) of village land for permanent protection if Gvt. provides trees and fencing wire. When asked, they responded favorably to the idea of raising the size of the protected area to 100 acres. They want fast growing species of trees but need to have access to fodder for their cattle and goats. Agro-forestry, they felt, will be more difficult, due to shortage of water and their 1-crop system under which they bring their cattle into the crop lands to graze during the fallow season, thus threatening young trees. Individual farmers expressed interest on a personal basis, but there was no village consensus.

They have further proposed a Dairy Farm project to the livestock dept., but have found no funds yet. They indicated their willingness to carry half the costs for start-up. (Heifer project not known or established here.) Some new breeds have been brought in about 1985 by the project, including 42 Red Sindhis, but they were rejected, at least partially due to the enforcement ban and resulting shoot-out. They confirmed their commitment to keep the area poppy free in the future and expressed interest in trying a livestock project once again. Poultry hatchery, breeding and a demonstration farm have been proposed by the project but not yet tried.

Turning to the issue of sustainability and local participation, the leaders suggested the top need is to educate the people. Said a thoughtful and articulate spokesman,

"Now the people think only of cash money. They must learn to think about their own place in development. Subsidies are not good for us in the long run. I went to the DC early when the subsidies were offered and begged him not to give out free seeds, cash, etc. but instead to build us a polytechnic so we can have a permanent institution to lift up our people and train them for good jobs; that way they'd get more money forever. I also asked the AC, 'Why do you give these gifts? The people are ignorant so they accept them, but you are a wise man. You know better that this will not help them in the future.'"

Village Leaders Focus Group Interview

Village/Location: **Chanai/Bagla**

Date: 7/26/90

No./Composition of Group: 11 Elders, 4 young farmers, including Mbr. of UC
Gabasni & ex-Chmn UC

We pulled off the mountain road near the village of Chanai about mid-morning and, finding a comfortable spot under the shade of some remaining Pine trees, sent word around the village area that we would like to meet with any farmers and elders who may be available on short notice. Within a few minutes the former Chairman of the Union Council, armed with an elegant German pistol in a hand carved wooden holster, arrived to be followed shortly by 10 other elders and 4 young farmers. Within short order a lively discussion was underway.

They began by indicating that they are most pleased with the road, of which 15 km. passed through the UC. It had dramatically improved access in and out of the area, bringing an increase in business and services. Second, they welcomed the electrification now underway, and thirdly, they approved of the efforts to strengthen education and health through the construction of the local high school and Basic Health Unit.

Asked how these projects came into being, they indicated that it was all linked to the enforcement of the Poppy Ban in 1986/87. The Union Council invited the AC and Governor's staff to Gabasni and agreed to eliminate poppy production if their basic needs could be met. Their top priorities then:

◆ Road ◆ Schools ◆ Electricity ◆ Polytechnic College

It took countless visits to finally obtain agreement to their demands following initial commitments by the AC in 1986 but these were confirmed by 1987 and construction began soon thereafter. The road was constructed by a Peshawar contractor under C&W supervision.

The future maintenance of the road, however, worries them. It needs to be blacktopped if it is to survive properly. The Union Council could organize a local contract for road maintenance but they would need to receive some funds from Government. Although they have lost income of Rs. 2 million a year from poppy production and are thus not particularly flush at this time, should Govt. or the project agree to metalling, the leaders indicated that the villagers could tax themselves to help with maintenance.

Discussing the most disappointing projects in their area, they qualified their remarks by saying that they had generally been pleased by all projects, although they knew of a very disappointing irrigation project on the Beit Gali side. Forestry plots, however, had had a few problems because the species planted had not survived the dry period and most seedling had died and generally speaking the area is not good for citrus as water is not available. They enjoyed the "watch & ward" salaries, however, recognizing that they really amounted to a political bribe to assure that they would not grow poppy.

"Naturally we accepted the Minister of Agriculture's offer of salaries but we are disappointed that only the influential people get the money."

When the money stopped, so too did the protection, although they agreed that, should Government consider replacing the trees with a species more appropriate to the rainfall constraints of the area, they would provide the necessary protection from their side through a village ban enforced by the Jirga.

Turning to outstanding needs in the village, they enumerated 6 of particular concern:

- 1. Technical College--this has been discussed many times in the Jirga and all agree it is the top priority. They have identified a site between Chanai and Ghanichatra and the landlord is ready to donate the land. Gabasni, Ganichatra, and Kabgani also have indicated they want such a school and are ready to donate land. In "upping the ante" the people of Chinai indicated that they will provide free labor as much as is required.**

"Everybody will do," said one villager. "No one will refuse to help build the Technical College... and I think we can raise some cash, too..."

- 2. Employment from the Industrial Estate--Jobs are a major concern and they expressed disappointment that they had never received any visas for villagers to travel abroad for work, even though they had paid Rs. 2000 each 2-3 years ago on the understanding that a visa would be forthcoming.**
- 3. Land-leveling by bulldozers--this had been promised, they indicated, but nothing has happened to date.**
- 4. Dug well--this would be practical in the lower areas and people would be ready to contribute money as well as labor for construction and maintenance. The project provides wells without contributions now, so they haven't offered, but are ready to do so if required.**
- 5. Veterinary Dispensary--animal care is a priority and they are ready to pay for medicines.**
- 6. Forestry--as mentioned above, they are ready to try again with the forests, providing their own protection through the Jirga system.**

Concerning women, they appreciate the NFE program and midwife training programs. There is a perceived need for a lady doctor in Manglechai and all are ready to pay for medicines.

This is an active and committed village from all appearances. They have contributed labor and cash to the construction of village paths and the local mosque. Some years ago they also raised Rs. 10,000 a year for 3 years for a 25 km. bridle path from Chinai to Gabasni, a joint project with gvt. for which they provided both cash and labor.

Village Leaders Focus Group Interview

Village/Location: **Nara**

Date: 7/26/90

No./Composition of Group:

11 Elders, 6 younger farmers, plus Chairman of Union Council

Nara is located in what has been, until recently, one of the more inaccessible areas of Gadoon, at the end of a recently opened but still poor gravel road. Infrastructure developments have been relatively slow in coming to Nara, due, they indicated, to delays by the local project leaders. What should have taken 6 mos. has dragged out for years, but things are apparently moving now. To date they have begun 4 irrigation projects of which 2 have been successfully completed. A veterinary dispensary is also built but awaits the posting of a staff member. Girls and boys primary schools are also under construction and electricity has just arrived--although only 4 families can afford to hook up. They reported that supervision and money has been forthcoming from the project, but the problems has been that the local leadership has been ineffective. (The team was not overly impressed by the Union Council Chairman, a young man with less to offer than the old men.)

They have used the project committee approach only for developing and implementing projects and have neither used nor seen a role for the Union Council, as they consider it to be weak and ineffective because its concerns cover as many as 10-15 villages while they need a local institution that will focus on their own village. Members of the UC have, however, been involved in their individual capacities as project leaders. The UC has some limited funds of its own through the District Council for such things as paving stones for village streets and potable water supplies, the latter using only half inch pipe compared to the 1-2" pipe provided through the project. Some UC schemes initiated as long ago as 1968 are not yet completed. Of the 7 UC members, 5 are illiterate and represent political factions. In their view the District Council needs to provide better trained Council Secretaries, plus a local sub-engineer. Project leaders come from the same leadership structure. Improvements in management, in their view, will only come if Govt. or the Project exercises strict controls or takes over sub-project implementation. Given current conditions they are ready as a village to provide land for new infrastructure projects but they are not ready to provide cash or labor. One elder landlord, progressive in his views on development and education, indicated he is ready and willing to donate any amount of land for schools.

The best among the projects completed have been potable water supplies in Kapla, Bela, and Kuprai where 2 systems are under construction.

Their priorities for the future include:

- ◆ Education: Girls Middle and High School, particularly so local girls can become teachers for the local schools
- ◆ Health: Complete the IRHC as soon as possible

- ◆ **Agriculture:** They have some good land but the water is below it. They need lift irrigation to improve production. Specifically, they would like to get:
 - Fertilizer for maize and wheat
 - Mulberries for siikworms
 - Improved seeds for wheat, maize
- ◆ **Forestry:** Forest protection is essential and they would like to develop a village program, plus orchards for Walnut, Apricots, Apples, and Silk
- ◆ **Employment:** The Industrial Estate in Gadoon has promised jobs but no result yet. Local peple have tried to go there but the transport is too expensive and their are no affordable accommodations near the Estate.

A number of progressive farmers in the village are already using fertilizer purchased from commercial sources and several have started growing fruits. The team saw a number of these trees in the village, including Golden Delicious Apples, Figs, and Mulberry trees which they are currently growing for fruit, but hoping to start silk production. They value their fruit trees highly, one man having been killed locally for continually stealing figs from his neighbor. They are ready to put their own labor into programs for improving agriculture, horticulture, orchards, and forestry.

Concerning their women, they are disappointed by the NFE program because they see it as offering little so far beyond basic literacy and health training for older women. They would rather have schools for the girls and handicraft programs for them after primary school or matric and young men should be trained for PTC teacher.

Village Leaders Focus Group Interview

Village/Location: Negrai
No./Composition of Group:

Date: 7/28/90
8 Elders plus 12 younger farmers

This village was among the first to stop producing poppy and initiate development initiatives under the project. To date 53 projects have been completed in the Union Council and all 7 UC members have been project leaders. Three completed projects in the village itself include a primary school, potable water supply, and irrigation channel, the latter 2 having been led by UC members.

The most successful projects in the area have been the primary schools and 3 girls middle schools that have been completed. Several villages had no schools at all before the project and girls had no access to middle schools. Local contributions included land from project leaders. Virtually all projects were initiated and implemented by project leaders. The Union Council is perceived as weak and lacking any resources. To become effective, village level organization is first needed in order to respond to local needs. Further the Councils need funds, perhaps to be channeled through line agencies. Technical assistance and staff training are also needed. More effective than the Union Council is the village Jirga which often makes direct representations to the Assistant Commissioner for development assistance. They see it as the logical framework for managing local development.

The least successful of their projects have been the fruit orchards and forests, where survival rates have been low. Plants were not available at the proper time, they asserted, and maintenance funds too limited. No replacement plants have been available where seedlings have died. The team visited a hillside forest site near the health center. Of 40 planted seedlings only two had survived. All forest/orchard projects were initiated by individuals and, since many applied and only 1 was approved, the village held a lottery.

In order to ensure sustainability, the group indicated that they should raise local money to help cover maintenance. No follow-on contracting has yet happened, though they feel qualified to take on more projects, either for government or private interests.

How could they have been more successful/sustainable?

"We should have provided the labor ourselves, and--if we had been given good stock at the right time--we might have been able to have kept them alive. However, due to shortage of rainfall and damage done to the root structure of the seedlings by intercultural planting/ploughing, plus our own neglect--most plants died. We have a forestry nursery 10 kms. away where plants are available for purchase. We hope the project will supply replacement, but perhaps now we should think about buying some of our own."

Looking to the future, they articulated five key needs:

- ◆ **Technical College** "We are ready to give both land and some of the labor needed to build such a school. It is greatly needed."
- ◆ **Roads** "The local road should be metalled and feeder roads added to other village and lands areas so we can get our crops to market"
- ◆ **Electricity** Electrification is wanted for both lighting and food storage and/or processing
- ◆ **Cold Storage** Facilities needed for keeping vegetables and fruits produced locally
- ◆ **Jobs** Gadoon Industrial Estate or elsewhere. Gadoon, however, is seen as a problem because it is so far away and transportation and/or living costs are high

Regarding women, they expressed disappointment with the NFE program because it has done so little as yet:

"The lady trainers just come and go in government vehicles, but we have no functioning handicraft program yet. We are ready to give land for an NFE center, and are ready to start now, but we do want some productive training to begin for the women."

Village Leaders Focus Group Interview

Village/Location: **Beitgali**

Date: 7/29/90

No./Composition of Group:

Landowner/farmers, Agricultural 7/30/90 Assistant, ex-Chmn. of Union Council, Elders, and young farmers (Total: 120)

We arrived in Beit Gali about 1:30 pm after a 3-4 hour hike over the hills from Shingrai. After Welcoming us with tea at the Hujra, the villagers offered to call all available Union Council and Jirga members and active farmers for a discussion that they suggested take place about 4 or 5 pm. After washing, enjoying eating a delicious 4 course meal that appeared miraculously, and taking a short afternoon nap, we found a large group gathering at the high school. An hour-long meeting was held with a group of elders and young farmers in the high school courtyard. Separately, a village and lands tour at sundown took us to the newly completed high school, veterinary dispensary, intercropped fruit and maize fields, village mosque, shop, "hujra," and private home, accompanied by a young landowner, his father, and local Agricultural Assistant. After a pleasant night's sleep under the open stars, protected by a village appointed armed guard against any adversaries, real or imagined, we rose at dawn, enjoyed a delicious breakfast of eggs, fresh bread, and tea, and--accompanied by an entourage of elders and farmers, walked an hour over the hill and down to Satana village where a local ferry boat awaited to take us up river into Kala Dhaka. We then returned, crossed the river to Darband, and found a project vehicle that had been waiting since the previous afternoon to take us to meet project staff in Manshera.

Meeting with 6 Elders, ex-Chairman of Union Council, 4 young farmers:

A large number of projects have been completed in Beitgali, but the one that they felt is of the greatest benefit thusfar is the recently completed High School. This was requested in 1987, and begun in 1989 by a Project Committee under the leadership of the then Chairman of the Union Council, advised by all villagers.

Virtually all projects in or near the village were started and implemented in a similar manner, including the Veterinary Dispensary, Basic Health Unit, Irrigation channels, and a new potable water supply.

The community did not see any problems associated with operating and maintaining the waters supplies and irrigation channels, taking the responsibility on themselves, but they are concerned about the future of the Health Unit, Veterinary Dispensary, and schools as any shortcomings of the concerned line agencies could not be met from local resources.

Least successful, in their view, are the forest and orchard support projects which had been allocated by local lottery. Saplings often did not come at the correct time, and funds for caretakers are not adequate to provide protection for the time required for trees to reach adequate height to withstand local goats. (As noted, below, some farmers recognized the subsidy for what it is, an inducement to turn away from poppy, but are nevertheless committed to continuing orchard development without subsidies.) There is

broad support for expanding orchard and forestry activities and agreement that if the project could provide seedlings and fencing materials, the farmers will provide labor and supervision without cost.

Looking to the future, the village showed evidence of commitment to a self-help approach, pledging land and partial labor for proposed upgrading of the Health Unit to an IRHC and completion of a second village water supply, the first being inadequate to serve the needs of the newly created facilities. The task of organizing and implementing such efforts is seen to be the task of village committees. They saw no useful role for the Union Council as it had neither funds nor trained staff.

Road access emerged as a major concern while interest was also expressed in providing a rest house for visitors and inspecting officers, staff housing for high school teachers, more cottage industry opportunities and a technical school of college to serve the larger area. For other villages in the Union Council, they saw needs for a high school for Kaneer, primary school for Besak, and a girls primary school for Devo and Chaklee. In virtually all cases they pledged land and partial labor as a local contribution. Regarding their women, they reported that the NFE Center is working well in Beitgali, teaching local women sewing, stitching, handicrafts, embroidery, and medical care. The program has also helped start a girls primary school and the community has endorsed the idea of a girls middle school. They also feel a need for a mother-child health center, for which they are prepared to offer a free house.

Village and Farmland Tour:

The Veterinary Dispensary was requested in the summer of 1985 when the Project Director came to the village on tour. It was started in March 1986 under the leadership of the then Chmn. of the Union Council who organized a local project committee on his own behalf. It was the first time he or his committee had constructed a public building and it cost a total of Rs. 162,000 and is built on 3 kanal of land donated by the project leader. The Vet. Dept. operates the center, having staffed it with a Stock Assistant who lives in the village of Gujar Hattian, about half an hour walk to the South. The Dispensary serves Beit Gali and 8 nearby "bandas" (hamlets) with a total of over 100 families or about 700 people. It is reported to be operating effectively and is hampered only by the distance which the Stock Assistant has to walk daily. Quarters for the officer near the clinic would alleviate that problem and help make him more readily accessible, especially outside office hours.

The local primary school was first upgraded to a middle school and subsequently to high school status under the tutelage of the same project leader who constructed the dispensary. He donated an additional 3 kanal of land for the school and the school is reported to be staffed and functioning normally.

The farmland tour took us to see about 30 kanals of land planted with Mangos, intercropped with maize and bordered with fuelwood species and rock walls. The farmers reported that they really appreciate the fruit plots, including, of course, the stipends provided for "watch and ward." Said one farmer,

"Of course, I would like the payments to continue, but I realize it is strange that I should be paid to watch my own land. Its's just a reward for stopping poppy production. I would like to continue with agro-forestry, however, and realize that I can't expect to be paid to do that. I will collect money as long as I can then I'll take charge myself. I want to expand citrus and mango production and also would be interested in some forest production on the mountain."

The same farmer indicated that he has doubled his wheat yield from 40 to 80 mds. annually with improved seed and fertilizer provided from the project. He estimated that if he bought his own seed and fertilizer, he would still have a net increase in income equivalent to 20 mds..

His father, referring to his 5 sons and 2 daughters, wants one son to get a job outside the area, but cannot find any good job for him. He has been trained as a driver, has a license, but can't get a job. One man, he reported, went to Gadoon Estate for work, earning Rs. 900 a month. He couldn't continue, however, because all his money went for transport and/or accommodations near Gadoon. He decried the lack of any sort of hostel at Gadoon.

For his daughters, he wants them to participate in the NFE programs and on to school in a local girl's school, particularly so they won't have to go outside the village for an education.

Village Leaders Focus Group Interview

Village/Location: **Mabra, Kala Dhaka**

Date: 7/30/90

No./Composition of Group: 3 Elders and 4 farmers, assorted youngsters

Our trip up into Kala Dhaka was made by boat. We walked from Beit Gali over the hill to Sathana, engaged a local diesel powered launch and proceeded upstream about one hour. After stopping at one village--where we found the men had all left for Darband, leaving only the women and children--we proceeded on upstream to Mabra, along the West Bank of the Indus.

Not having the luxury of time to enjoy local hospitality, we asked the men of the village to join us aboard the boat for a discussion. They, of course, have not had any fruits from the new Kala Dhaka project, so could only discuss their needs and interests with an eye to the future. Noting that they are poor and must always try and send their young people to work in Karachi, from where they send money and wheat. Their top priorities for action:

- ◆ Upgrade Primary to Middle School--to provide local jobs and amenities, the villagers indicated that they are ready to provide labor and land for said school
- ◆ Basic Health Unit--as for the school, above, the villagers indicated that they are ready to provide both land and labor
- ◆ Primary School staff--a building has already been built with the help of the local MPA, but still has no teacher
- ◆ Road or Bridge--cut off by the Indus/Tarbel Reservoir, they feel a real need to be connected to the rest of the province, suggesting that an inexpensive pontoon or boat bridge would be quite adequate
- ◆ Factory Jobs--hopefully in Darband, they feel a strong need for finding ways of increasing their cash income, being caught in a hostile and unproductive environment which cannot support them. The Industrial Estate is too far.
- ◆ Afforestation Plots--especially for pine and fuelwood, and creating jobs for people... the Rs. 750 a month that the Gadoon people got would be most welcome
- ◆ Electricity--for both lighting and local production activities

Village Leaders Focus Group Interview

Village/Location: Degra, nr. Shingrai, enroute Beit Gali Date: 7/29/90
No./Composition of Group: 12 Elders and young farmers, (plus a dozen curious young boys)

It was a very hot day as we walked over the steep, stony trail toward Beitgali and passed through the village of Degra. Their insistence that we stop for refreshment was most welcome and we took the opportunity to gather and talk with a group of elders and young farmers while we enjoyed their tea and biscuits.

They are most pleased with the recent completion of a primary school in the village, noting that previously they had to send the fortunate few to Nara, an hour and a half by foot each way. "Even now, however," they said pointing to a building on the top of a steep hill 1 or 2 kms. away, "we have to send our boys there for Middle School... and the only High School is still in Nara, but the primary school has made a big difference." On the production side, they also value the irrigation efforts, noting that it will help improve their crops.

Least useful to their people is the Gadoon Industrial Estate, which they perceived as offering them no benefit. One local man got an unskilled labor job there but he had to travel 3-4 hours each way and the transport took almost all his meager earnings. In their view there is no suitable place to stay near the Industrial Estate, as lodgings are too expensive, of a very poor standard, and/or provide the temptation of falling into bad company. They very much want job opportunities, but The Industrial Estate is no answer at present.

Future requirements include first and foremost, a potable water supply and road connection. They showed us the steep rocky path that led a mile and a half downhill to a small spring below the village. We could attest to the road issue personally, and could understand why they appeared quite willing to contribute their own labor toward the implementation of both these initiatives. Other perceived needs, include jobs (qualified as above), land leveling, and forest plots.

For their women, they are very interested in having an NFE center for embroidery, handicrafts, and health (immunizations/injections). They have heard good reports about these activities elsewhere and hope they might be included.

Village Leaders Focus Group Interview

Village/Location: Zorabad/Mardan

Date: 8/8/90

No./Composition of Group: Cashier and Secretary for Village Development Committee, 3 VDC/Jirga members, school teacher, 3 young farmers

Adjoining the project area, this village shares similar socio-economic and ecological systems with the villages of Gadoon, particularly those in the southern tier, and its resident also used to raise some poppy. It differs significantly from project area villages, however, in that it has undertaken virtually all development activities on a self-help basis under the leadership of their own Village Development Committee (VDC) that was initially organized with the support of the social organization component of the Pak-German Integrated Rural Development Program/Mardan.

Over the past few years the VDC has constructed a potable water supply, village drainage system, added 2 rooms to the local school, and purchased a tent for the village mosque. They also have sponsored a livestock development program under which a villager is being trained in livestock management and farmers are developing fodder plots and a seed multiplication program implemented by a progressive farmer.

They are also preparing to meet in about 10 days to review a "community self assessment survey" that was conducted by ten local volunteers who received training through IRDP and which examines land, livestock, family, agriculture, and energy issues at the household level. (Preliminary results show there are 327 cows in the village but they only produce an average of 1 kg. milk per day, suggesting scope for their livestock improvement interests.) This survey is part of a planned strategy that starts with awareness building and leads progressively to village planning, priority setting, and mobilization.

The VDC members explained that in their view village development cannot be done effectively by individuals but must be the result of collective efforts. The IRDC program helped them create a sense of collective action and to see it through the completion of successful projects. They understood the basic principles even before the project, because they knew that their own Jirga had always been a positive force for collective action for social and traditional affairs. They wanted to do the same for development. They first learned about the IRDP approach when they many of them attended a Swabi cattle show and then were invited to the opening ceremonies for a new water supply in Sherdera village. With the encouragement of an IRDP Social Organizer (AKRSP trained and experienced), they formed a village group, in which all villagers were members, held lots of discussions, and finally got organized with officers and an initial work plan.

Today about 167 of the 200 village families are active with the VDC. The village includes 10 clans/sub-tribes, each of which has its own Hujra and meetings of the VDC are held by rotation in each of them. The VDC has a coordinating committee with a representative from each Hujra, these elected members not unexpectedly being the same individuals as comprise the Jirga. Important issues for the whole village are announced at the Jumma

(Friday) prayers at the central mosque and, where necessary, the whole village meets after prayers to discuss and take action. The most recent such decision was made concerning the starting time for free grazing on the hillside above the village.

They developed a consensus first for a water supply, with each household contributing cash of Rs. 40/hh. for a total of Rs. 8,000, the IRDP contributing the remaining funds. Four wells needed to be dug, so they formed teams of ten villagers to dig each well. By agreement these workers were paid a wage of Rs. 25/day (less than going rate of Rs. 30/day), and additional unskilled labor was donated by groups of up to 25 other villagers on a rotational basis.

Subsequently they organized a program to build village drains, using 100% donated unskilled local labor, and complemented by outside materials and skilled labor from IRDP. Two rooms were also added to their local school and each household contribute Rs. 50 to help the local mosque buy a tent.

Of all the completed projects, the water supply was their top priority, but they are proudest of the school classrooms. Why? "Because we did it all on our own."

Looking ahead, they consider agricultural development to be their top priority as most households cannot meet their food needs without outside income. (The Community Self-Survey indicated that 4 families depend heavily on charity for survival while the Koranic charity distributions of Rs. 50-100 go annually to about 50 low income families. Other priorities include a feeder road to the village, flood protection from the seasonal riverbed that flows through the village, and health services.

For their women, the IRDP has been helping with programs in sewing and embroidery and has helped get a girls primary school begun in the village. 20 girls are already going to the boys school but they estimate that about 100 will attend once the new school is completed. (By comparison, about 250 boys are in primary school and 60 are going outside to high school.)

In conclusion, they emphasized that their VDC is a permanent institution now -- on that takes action on its own without the IRDP today and will continue to oversee ongoing development and maintenance long after the IRDP has gone away. They invited all interested Gadoonis to come and share experiences.

Village Leaders Focus Group Interview

Village/Location: Gaira/Qadra

Date: 8/11/90

No./Composition of Group: 3 Elders who traveled to Topi to find a team member

"We have come to you," these elders said upon buttonholing the Team Leader at the PCU, "because no one has come to us."

"The projects and forestry/orchard plots are only going to the influential ones and the rest of us get nothing. Whatever AID has given there should be an inquiry on how the money is spent. The distribution should be equitable, and we would like it to be in cash to each person."

"Last year people planted 800 kanal of poppy which was destroyed and this year they planted none... but they will go back to poppy if the benefits just go to the few. They are fed up in our village."

In discussion, the gentlemen acknowledged that they had 10-20 dug wells, 10-12 orchards, 1 completed irrigation system and 1 under construction, a water supply, and 2 new classrooms under construction. One man's son had obtained a job through the project.

Of these, the best were, in order: (1) Water supplies, (2) Jobs, (3) dug wells and irrigation, (4) land leveling, and (5) orchards--as long as they were available for all people.

The worst projects were those they saw as plagued by inequity: the distribution of orchards, of course, as well as a sharing system for irrigation water. No system yet exists and most people don't get access to water as a result.

In the future, they would welcome a partnership system without subsidies in which all people could share equally.

Village Leaders Focus Group Interview

Village/Location: Gandaf
No./Composition of Group:

Date: 8/11/90
Ex-MNA, and about 6 Elders/farmers

We arrived unannounced in Gandaf late in the afternoon, responding to repeated invitations by the village's ex-MNA and ex-MPA, and to seek input from project leaders who had come to see us at Topi but been unable to do so. The two former legislators are reputed to have been very active in the poppy trade and have both been project leaders for a number of schemes in the area.

We first called on the home of the ex-MPA at the lower end of the village. (Recent rains had washed out parts of the main road through the village, so we walked through the village, noting several gatherings of villagers discussing the washout problem and working to re-connect water pipes that had been disturbed by those washouts.) The ex-MPA was away in Peshawar, so we passed greetings to him, together with an invitation for him to look us up on his next visit to the city.

Proceeding to the upper end of the village, we came to the home of the ex-MNA near a shaded Hujra and nice mosque, presently undergoing renovation with funds raised from each household. Unfortunately, we learned that he, too was not at home, but up supervising the construction of a lift irrigation project over the top of a nearby hill. We learned, however, that he had been called and was on his way to see us. In a few minutes we saw a small figure moving quickly down the distant hillside. He joined us, perspiring, but most gracious. After politely refusing his attempts to present the Team Leader with an antique sword and buddhist carving, he turned to his concerns:

The give-away programs were very beneficial, he noted, but many of them were doing little for long-term development of the people. The real priority, in his view, must be education, and--in particular--technical education so that young people could get good jobs, not just unskilled labor jobs. In his words:

"If you give a man a million rupees it will soon be gone. The project has been doing that, and it will soon be gone. But if you educate a man he is able to take care of himself and his family for a lifetime. This is what we need."

ANNEX 7

OBSERVATIONAL SURVEYS

OBSERVATIONAL SURVEY	Route (asph) Malakabad Ghanichatra Date: 7/25	Route (grav) Bada, Chinai Birgali Date: 7/26	Route (grav) Nagrai Swat Date: 7/28	
	Cond OK	Cond poor	cond fair/poor	
Roads				
Washouts in road	5	10	1	
Washouts damaging field	1	3		
Improper drains, kms.	2 km	15 km		
Tree plantings, kms.		11 km	0.3 (5%)	
Forest	3	4	2	
Plantations, No. (Survival)			(5%)	
Orchards, No. (Survival)	5	2	3 (80%)	
Cut timber/trunks/poles, etc.			31	
Agriculture				
Washout/erosion	1	2		
Dugwells	2			
Irrigation	1		2	
Tractor	5			
Fertilizer (bags)	20		3	
Demo. plots		1	3	
Honey bees			1	
Schools	3			
Built Primary		1	2	
/seen Middle		2	2	
High			1	
Girls	1		3	
Operating/staffed	2	3	2	
Health			1	
Integrated Health Center				
Basic Health Unit	1	1		
Operating/staffed	1		under const	
Water Supply, potable				
Operating		2		
Veterinary Dispensary	1	1	2	
Operating/staffed	1	1	2	
Women				
Carrying firewood	5	4	1	
Carrying water	1			
Agriculture				
Other	1	10		
Rivers/streams, clear silted			3	
			3	

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OBSERVATIONAL SURVEY

Route (foot)
Shingrai, Beitgali
Date: 7/29

Route (boat)
Saiana, (boat)
Kala Dhaka
Date: 7/30

Roads	cond v. poor	(E. bank only)
Washouts in road	walking trail	5 in 5 km
Washouts damaging field		
Improper drains, kms.	eroded	
Tree plantings, kms.	No bridal path	
Forest		
Plantations, No. (Survival)		Barren W.
Orchards, No. (Survival)	2 (mango)	bank; mod.
Cut timber/trunks/poles	512 bundles	forest E. bank
Agr'culture		
Washout/erosion	(1 stagnant, 1 blocked)	
Dugwells	4	
Irrigation		nil
Tractor		
Fertilizer (bags)	1	
Demo. plots	1	
Honey bees		
Schools	4	
Built Primary	1	1
/seen Middle	2	
High	1	
Girls	3	
Operating/staffed	8	0
Health	(requested)	
Integrated Health Center		
Basic Health Unit	1	
Operating/staffed	(ready for H/O)	
Water Supply, potable	2	
Operating	2	
Veterinary Dispensary	1	
Operating/staffed	1	
Women		
Carrying firewood	1	2
Carrying water	1	2
Agriculture	6	
Other	3	
Rivers/streams, clear	1	
silted	2	lake cloudy
Boats crossing		12
Villages seen		7
Houses		900
Tin roofs		12

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ANNEX 8

A SOCIAL FORESTRY MODEL

**ISLAMIC REPUBLIC OF PAKISTAN
FORESTRY DEPARTMENT, NWFP**

**KINGDOM OF THE NETHERLANDS
MINISTRY OF FOREIGN AFFAIRS
DIRECTORATE-GENERAL FOR
INTERNATIONAL DEVELOPMENT
CO-OPERATION**

MALAKAND SOCIAL FORESTRY PROJECT

WORKPLAN

March 1989

1. INTRODUCTION

The Malakand Social Forestry Project is a project of the Forest Department of North West Frontier Province, Pakistan, supported by the Netherlands Government, Directorate General of International Cooperation (DGIS). DHV Consultants, the Netherlands, provides technical assistance. The main objective of the project is to increase the standard of living in the villages of the Malakand Agency, NWFP, by making a better use of the environment and by initiating community development activities.

Therefore, soon after commencement of the project in February 1987, the project team came to the conclusion that not enough money was allocated in the PC-1 to carry out activities of forestry extension and training. The team felt the need for including in the project a more extensive social component, to ensure both the management of the plantations on a sustainable basis, and project benefits for all social groups making up the population of the Malakand Agency. The matter was discussed with the staff of the Royal Netherlands Embassy, Islamabad, who endorsed the idea of extending the project's social component.

2. PROJECT OBJECTIVES

The main objectives of the project are:

- 1. Increasing the standard of living in the Malakand Agency, by making a better use of the environment and by initiating community development activities.**
- 2. Increasing the production of the hillsides of the Malakand Agency on a sustainable basis, through active participation of the communities.**

3. Ensuring plantation benefits for all the current users of the marginal areas, in perpetuity.

These objectives will be realized through:

1. Reforestation, range management, erosion control and other village development activities.
2. Village organizations (Village Development Committees) which will act as intermediaries between the village community and the Forest Department. Eventually, the committees will act as independent bodies initiating village development activities, and taking the responsibility of managing the village plantations.
3. Training and re-orientation of Forest Department staff such that they will become agents for technical backstopping in the area, and will assist Village Development Committees in establishing a process of self-development.

3. TARGET POPULATION

The project's major target groups are the current users of the marginal hillside areas. A distinction can be made between:

- Small landowners/farmers: Small farmer communities are found, inter alia, in the Kot/Uthmankhel area of the Agency and on the fringes of villages where large owners hold most of the land.
- Big landowners: Villages with mostly big landowners occur in the Swat valley, in the upper part of the Malakand Agency (Thana, Alladand, Khar), in the lower part of the Malakand Agency (Mehrdi, Sakhakot) and in the Palai area. Within the Agency the big landowners have considerable influence.
- Tenants: The tenants obviously live and work in the same areas as the big landowners. They depend on the hillsides for grazing of their animals, and for the collection of firewood.
- Landless labourers, artisans and unemployed: This group occurs throughout the whole Agency and depends on the hillsides for animal grazing and firewood.
- Gujars and Ajars: Animal keepers who make use of the hill tops for most of the year.

The program will also focus on school teachers because of their function as intermediaries in the diffusion of innovation through the schools.

The village women play an important role in rearing stall-fed animals; they are the actual users of the fuelwood and often the major collector of it. With a program aiming to encourage stall feeding practices, and to economize the use of fuelwood, the project will have a focus on women.

Another target group of the project is the staff of the Forest Department, not only within the boundaries of the Malakand Agency but in the whole of Malakand Forest Circle. The Forest Department staff need to change their attitude and begin to assist the local population in establishing and maintaining tree and grass plantations. Such a change in attitude is not easy, but imperative for a long lasting effect of the program.

4. THE SCOPE OF THE PROJECT

4.1 The ongoing project

The Malakand Social Forestry Project aims at increasing the production of the hillsides on a sustainable basis. Sustainability can only be achieved with the participation of the local population, because the Forest Department has neither the resources nor the manpower to protect a substantial area of plantations.

Hence, the project comprises of both a technical component, to carry out the afforestation, range improvement, erosion control and fruit tree production, and a social component, to enhance the peoples' participation in project activities. The original PC-1 provides for technical activities. However, it does not have adequate provisions for the social component.

4.2 The additional program

In the absence of a strong social component, there is a great risk that the project plantations will be destroyed as soon as the project pulls out of Malakand Agency. To prevent this, the original PC-1 has been supplemented with an additional program, which aims at the obtainment of peoples' participation.

Such a popular participation can only be achieved with the:

- organization of the village communities, so that a process of cooperation can be initiated between the different social groups which make use of the project plantations;
- training of villagers in the preparation of plantation management plans, afforestation, range management, nursery techniques, village organizations, and management of community savings; and,
- training of the lower tiers of the Forest Department, to make them capable of delivering technical backstopping to the village organizations.

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Thus, two major components of the additional program are (i) extension; strengthening of Village Development Committees, and (ii) training of villagers and Forest Department staff.

In response, the Malakand Social Forestry Project intends to extend the training program of the lower tiers of the Forest Department, to both the Dir-Swat Watershed Management Programme and the Income Generating Project. Thus, the first step has been taken towards the realization of a closer cooperation. Moreover, the Malakand Social Forestry Project will be a pilot project in the true sense of the word, if it disseminates the knowledge amassed in the field of social forestry, through the training program to other forestry projects.

The training program will be attached to the office of the Conservator of Forests, Malakand Circle. Training will be done in close cooperation with the Sarhad Forest School, at Thai, Abbottabad.

Besides extension and training, the additional program will focus attention on the women. The women program will assess the influence of the project activities on the women's workload and income, and will devise mechanisms for improving the position of the women in the Agency. The Agency being a very conservative area and the Forest Department having no experience of working with women, the program will apply a very cautious approach. The first entry into the villages will be through the stove introduction program. Such a program has to be carried out by women, as they are the only ones able to enter the kitchens. Stove introduction very well fits in with the afforestation program; tree plantations will last longer if the households consume less fuelwood.

5. PROJECT DESCRIPTION

The project's implementing Agency is the Forest Department, NWFP. No other Government Agency will be engaged in the project. The project deals with the current users of the marginal areas of the Malakand Agency and cooperates with them in the management of these marginal lands. To alleviate the pressure on the marginal areas, the project may get involved in activities on farmers' fields, and in and around the homesteads.

For instance, range management includes the encouragement of stall feeding practices. To promote stall feeding, fodder resources need to be brought to the vicinity of the animal sheds, which means production of fodder crops in and around farmers' fields. However, direct involvement in farmers' fields will be limited to activities directly related to the marginal areas, natural vegetation, trees and fodder crops, and their use. Interference with the responsibilities of Agencies other than the Forest Department will also be avoided.

Nonetheless, other Government Agencies in the field of agriculture and rural development will be fully informed about the project activities, so that they can take up the activities at the point where the project responsibility ends. However, if other Agencies do not follow-up on activities initiated by the project, and the lack of follow-up produces bottlenecks

counteracting the project's progress, the project may step in to remove the bottlenecks. In this respect special budget provisions are allocated under range management and extension.

The activities carried out, and the recommendations made by the project will be based on data collected through scientific research. However, the project will not become a research project. For the collection of basic data, the project will primarily depend on Pakistani research institutes. In case the approached institute is not able to provide the data, the research will be carried out by project staff.

The project activities will be limited to the Malakand Agency, except of the project's training component which will extend to the whole of Malakand Forest Circle. Preparation of the curricula will be done in cooperation with Sarhad Forest School, at Thai, Abbottabad.

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ANNEX 9

A SOCIAL ORGANIZATION MODEL

The role of Social Organization in Local Development
Interview with Tariq Husain
DRMS Islamabad

8/2/90

See: 1980 Agriculture Census for Gadoon area
--income, land ownership, & cropping data (Table A.1)

Ordinary villagers are not reached through conventional village notable channels used by Colonial and Post-Colonial governments. They have their traditional grazing, forest, and crop management systems rooted in local institutions. To tap into these the normal governmental/extension approach won't work as it links only to contact (wealthier) farmers, informers, landlords, council members, and project committees. Instead a parallel NGO linkage seems to work best, bypassing traditional access lines and tying directly into the traditional village organization and ordinary villagers.

The PCU of the Gadoon project is ripe for conversion to an NGO, a Gvt. organized NGO--or GONGO--perhaps paralleling the initiatives proposed for the Sarhad Rural Support Program, and even, perhaps, borrowing or tapping its Board of Directors for some key members. It's already semi-autonomous, has mechanisms for tapping outside (AID) funds, has Gvt.'s blessing, and is headed by a seconded civil servant. It could receive gvt., donor, and pvt. money directly, purchase TA services from the (former) AID team and others as needed. AID, during this last phase of the NWFADP could set it on its feet, give it a life of its own, and pull away--probably within the life of the project. Alternatively AID could provide a small pot of new money, or extend the project partially, to keep it running through a reasonable start-up phase.

The key to such a GONGO's success will be its ability to energize village level organization and mobilize local people on a self-help basis. A small pot of infrastructure money would go a long way within such a framework: Essentially, the GONGO would be saying, the Sugar Daddy is gone, but there's still money for local projects... But "this time you get the goodies if you get organized..."

To facilitate such organization the PCU/GONGO would have to change its stripes, bringing Social Organization to the forefront of a village level development thrust. The current PD or similar generalist on secondment from Gvt., could head up the unit, at least for the transition period, but HQ would need to add a skilled, knowledgeable Soc. Organization person, now missing at the PCU.

The key element of this refocused GONGO would be a mobile team, led by a social organizer, and including agric. and engineering generalists, would move freely from community to community, helping stimulate and support local grass-roots initiatives, and

tapping into a range of agricultural, technical, and engineering specialists on a TA basis from the PCU and/or government line agencies as appropriate.

The Kala Dhaka project will have an edge in having excellent agricultural and public health movers and shakers on board, but AID won't want to do big infrastructure development activities like in Gadoon. They will, however, be able to channel quite a bit of money through local organizations if they maintain a solid social organization team at HQ.

"The last phase of NWFADP provides a unique, unparalleled opportunity to build on an already semi-autonomous entity and a broad diversity of solid achievement in NWFP unlike anywhere else in Pakistan, especially in social organization and social forestry. Here it could really work..."

The Pak-German IRDP in Mardan could be the best and most accessible model but other useful models and key people include: AKRSP, Gilgit Project; Akter Hameed Khanex-Comilla, and now working in Karachi's slums; the Ex-Sec. Forestry, & Local Gvt., a booster of the Pak/German project; and the Kalam Malakand projects.

ANNEX 10

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ANNEX 11

BIBLIOGRAPHY

- ABDEL-AL, ZIDAN E. The status of agriculture in North West Frontier Area Development Project and Tribal Areas Development Project constraints, solutions and future development. [no location provided]: PARK, USAID, MART, WINROCK, September 1989.
- AFZAL, MUHAMMAD. Local government in Pakistan. Islamabad: Local Government Extension Service, Ministry of Local Government and Rural Development, February 1985.
- THE AGA KHAN RURAL SUPPORT PROGRAMME: Twenty-seventh progress report, July - September 1989. Gilgit, Northern Areas, Pakistan: AKRSP, 1989.
- BARTH, FREDRICK. The Last Wali of Swat. Oslo: Norwegian University Press, 1985.
- BROWN, ALBERT L. Feasibility and design of an expanded coca substitution project being developed by U.S. Aid Mission to Bolivia. Washington, D.C.: American Technical Assistance Corporation, August 1976.
- BUREAU OF INTERNATIONAL NARCOTICS MATTERS. International narcotics control strategy report. Washington, D.C.: United States Department of State, March 1990.
- BUREAU OF STATISTICS, PLANNING AND DEVELOPMENT DEPARTMENT, GOVERNMENT OF NWFP. District census of rural settlements 1988, Vol. 5 Swabi. Peshawar: Planning and Development Department, 1990.
- CLAUSON, JAMES. Livestock and range management reports for the Gadoon-Amazai area. Washington, D.C.: Development Alternatives, November 1984.
- DEFOER, T. ET. AL. PATA Publication 48 the agricultural development programme of the PATA Groundwater Irrigation Project policy paper. Peshawar: Government of NWFP, March 1990.
- DUNCAN, EMMA. Breaking the Curfew - A Political Journey Through Pakistan. London: Arrow Books Limited, 1989.
- DURRANI, M. TARIQ. North West Frontier Province. Peshawar: USAID/NWFADP, October 1987.
- GHANI, SULEMAN. Concept Paper on Expansion of Development to the Kala Dhaka, Mansehra District. Mansehra: Deputy Commissioner Office.
- GILTROW, DAVID R. Reaching the people: creating a national drug abuse prevention resource center. Islamabad: Academy for Educational Development, December 1986.

- GONWFP.** A strategy to fight poverty through integrated rural development. Mardan, NWFP: IRDP, January 1990.
- GONWFP.** Activities of village institutions supported by Pak-German IRDP Mardan. Mardan, NWFP: IRDP, July 1990.
- GONWFP.** Background information on Behrain Range (Swat District of Malakand Division, NWFP, Pakistan): Report No. 1 Behrain at a glance (Draft). Zurich: Geographisches Institut Universitat Zurich-Irchel, June 1988.
- GONWFP.** Background information on the Kalam Tehsil (Swat District of Malakand Division, NWFP, Pakistan) A summary report on investigations made between 1982 and 1987 including baseline data. Zurich: Geographisches Institut Universitat Zurich-Irchel, May 1988.
- GONWFP.** Malakand Fruit and Vegetable Development Project pilot phase briefing notes. Saidu Sharif, Swat: July 1990.
- GONWFP.** P.C. I Gadoon Amazai Area Development Project N.W.F.P. 1983. Islamabad: 1984.
- GONWFP.** Pak-German IRDP Mardan Phase-II (1987-90) profile/brief. Mardan, NWFP: IRDP, June 1990.
- GONWFP.** Pak-Swiss Kalam Integrated Development Project highlights 1989. Kalam: KIPP, 1990.
- GONWFP.** Revised P.C. I Gadoon Amazai Area Development Project N.W.F.P. Islamabad: 1988.
- GUL, AHMAD.** Kalam Integrated Development Project (K.I.D.P.) Village Development Programme (VDP) annual progress report of 1987. Kalam: KIDP, 25 December 1987.
- GUL, AHMAD, Q. LITAFAT-UR RAHMAN AND M. SULEMAN.** Kalam Integrated Development Project (KIDP) Village Level Development Programme (VLDP) annual progress report from April to December 1986. Kalam: KIDP, 11 March 1987.
- GUL, BAKHTI AND RICHARD R. CORSEL.** Meeting on "Cooperation in Pathan society" held at the Pearl Continental Hotel, Peshawar on Saturday 24th Sept. 1988. Peshawar: 1988.
- HUSAIN, TARIQ AND TARIQ BANURI.** The Sarhad Rural Support Corporation: proposal for a new NGO in NWFP. Islamabad: Development Research and Management Services, 1989.

- INMAN, BUIS T.** Data needs for economic planning for the poppy region of Turkey. Washington, D.C.: Foreign Development Division, Economic Research Service, U.S. Department of Agriculture, May 1973.
- IRIS INTERNATIONAL, INC.** Landsat analysis of agricultural changes in Pakistan final report. Landover, Md: April 1983.
- JONES, EARL, ET. AL.** Evaluation of the USAID/Pakistan North West Frontier Area Development Project. Arlington, Va.: Development Associates, Inc., September 25, 1987.
- KRUSEMAN, G.** Socio-economic aspects of opium poppy cultivation selected farm profiles: the eastern Dir valleys and Dir Kohistan. Peshawar: Special Development Unit, Planning and Development Department, Government of NWFP, November 1985.
- LONHARDT, TOM.** Strategic planning meeting for the Special Development Unit, Planning and Development Department, Government of the North-West Frontier Province notes from the meeting 19 May 1990 Pearl Continental Hotel Peshawar, Pakistan. Peshawar: Training Resources Group, 1990.
- MALAKAND SOCIAL FORESTRY PROJECT.** Survey of 51 villages in the Malakand Agency: findings and recommendations for project policy, Technical Paper No. 2, Malakand: DHV Consulting Engineers, December 1988.
- MICKELWAITE, DONALD R., ROBERT LAPORTE JR. AND STAN SAMUELSON.** A review of AID's narcotics control development assistance program. Washington, D.C.: USAID, March 1986.
- MICKELWAIT, DONALD R., EDWARD J. PALMER AND PAUL R. CRAWFORD.** Recommendations for a revised narcotics strategy for USAID/Pakistan. Washington, D.C.: Development Alternatives, Inc., November 1982.
- NYDEGGER, E.** FDC monitoring of DIDP sector effectiveness: training of instructors and forest workers and follow-up 1982-1989. Saidu Sharif, Swat, NWFP, Pakistan: Pak-Swiss Kalam Integrated Development Project. December 1989.
- NYDEGGER, E.** Tool catalogue of appropriate tools for timber harvesting in Pakistan. Saidu Sharif, Swat, NWFP, Pakistan: Pak-Swiss Kalam Integrated Development Project. December 1989.
- PAKISTAN AND UNITED STATES OF AMERICA.** A project grant agreement between the President of the Islamic Republic of Pakistan and the United States of America for Gadoon-Amazai development. Islamabad: August 28, 1983.
- PAKISTAN AND UNITED STATES OF AMERICA.** First amendment agreement to project grant agreement between the President of the Islamic Republic of Pakistan and the United States of America for Gadoon-Amazai development. Islamabad: December 17, 1983.

- PAKISTAN AND UNITED STATES OF AMERICA.** Second amendment agreement to project grant agreement between the President of the Islamic Republic of Pakistan and the United States of America for Gadoon-Amazai development. Islamabad: July 5, 1983.
- PAKISTAN NARCOTICS CONTROL BOARD.** Drug abuse prevention resource centre PC I. Islamabad: 1989.
- PAKISTAN NARCOTICS CONTROL BOARD.** National Survey on Drug Abuse in Pakistan. Islamabad: 1986.
- PLANNING COMMISSION, GOVERNMENT OF PAKISTAN.** Special development and enforcement plan for the opium producing areas of Pakistan. Islamabad: November 1983.
- ROBERT, G. LAMAR.** Some potential methods to enhance the effectiveness of opium crop replacement projects in Pakistan based on experiences in Thailand. Islamabad: USAID/Pakistan, March 1990.
- ROBERT, G. LAMAR AND RONALD D. RENARD.** Opium Crop Replacement Without Tears or Terror - the case of Northern Thailand 1971-1989. Chiang Mai, Thailand: UNFDAC, November 1989.
- ROBERT, G. LAMAR, ED.** Recommendations of the UNDP/UNFDAC regional seminar on replacement of opium poppy cultivation, Swat, NWFP, Pakistan, 13-17 November 1989. Bangkok: UNDP/UNFDAC, 1990.
- RUKANUDDIN, ABDUL RAZZAQUE AND M. NASEEM IQBAL FAROOQUI.** State of population in Pakistan, 1987. Islamabad: National Institute of Population Studies, November 1988.
- UNFDAC.** The United Nations and Drug Abuse Control. New York: United Nations, 1989.
- USAID.** AID Evaluation Handbook. Washington, D.C.: April 1987.
- USAID/GOP.** Seventh amendatory agreement to project grant agreement between the President of the Islamic Republic of Pakistan and the United States of America for North West Frontier Area Development. 29 September 1987.
- USAID/PAKISTAN.** USAID in Pakistan: NWFP. Islamabad: undated [1989].
- USAID/PAKISTAN.** Assignment: Pakistan. Islamabad: 1990.
- USAID/PAKISTAN.** Change in Gadoon-Amazai. Islamabad: undated [1987].
- USAID/PAKISTAN.** Evaluation report North West Frontier Area Development Project Women in Development Sub-project (draft). Peshawar: July 1990.

USAID/PAKISTAN. Monthly monitoring reports on infrastructure construction. Peshawar: Rural Development Division, various.

USAID/PAKISTAN. NWFAD Project files. Peshawar: RDD, various.

USAID/PAKISTAN. Program in Support of Agriculture and Rural Development: USAID Mission to Pakistan. Islamabad: undated [1988].

USAID/PAKISTAN. Project Implementation Letters, NWFADP. Islamabad: RDD, various.

USAID/PAKISTAN. Project Paper, Pakistan Gadoon-Amazai Area Development 391-0485. Washington, D.C.: August 1983.

USAID/PAKISTAN. Tribal Areas Development Project: Basic data. Peshawar: USAID/Pakistan, April 1987.

US DEPARTMENT OF STATE. Unclassified cables and memoranda on NWFP and enforcement. Islamabad/Peshawar: various.

WILY, LIZ. Gadoon Area Development Project, working paper No. 4 manpower in the NWFP government with special reference to the agricultural sector. Islamabad: Development Alternatives, Inc., April 1983.

WORLD BANK. The Aga Khan Rural Support Program in Pakistan: An Interim Evaluation. Washington, D.C.: 1987.

ANNEX 12

AID EVALUATION SUMMARY-1330

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A.I.D. EVALUATION SUMMARY - PART II

SUMMARY

J. Summary of Evaluation Findings, Conclusions and Recommendations (Try not to exceed the three (3) pages provided)
Address the following items:

- Purpose of evaluation and methodology used
- Purpose of activity(ies) evaluated
- Findings and conclusions (relate to questions)
- Principal recommendations
- Lessons learned

Mission or Office: USAID Mission to Pakistan	Date This Summary Prepared: October 1990	Title And Date Of Full Evaluation Report: Opium Poppy Eradication: Development, Dependency, and Self Reliance. Oct 1990
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EXECUTIVE SUMMARY

Purpose of Project

The NWFADP project began in 1983 in the Gadoon-Amazai area of the North West Frontier Province of Pakistan. The NWFADP project purposes were to eradicate opium poppy production and to develop and diversify the area's economy. Two approaches were used: (1) The GOP enforcing criminal penalties and destruction of poppy crops while (2) concurrently initiating development sub-projects with support from USAID.

Methodology of Evaluation

To review the mid-term stage of Phase II activities in agriculture, infrastructure, and institutional development, field visits were made by the evaluation team members, operating in three small groups, to all seven Union Councils, 22 villages, and approximately 90 sub-projects. All main metalled and shingled roads were covered and two parts of Baitgall UC were crossed by foot. Two boat trips on Tarbela Lake/Indus River provided exposure to portions of Kala Dhaka, including visits to two villages and visual inspection of five others. Additional field visits were made to five other rural development projects in NWFP for comparative purposes.

Meetings were held with PCU/USAID staff, approximately 100 village leaders and farmers; GOP officials including Planning and Development, the Special Development Unit for poppy eradication programs; Local Government, Agriculture, Forestry, Irrigation, Communication & Works, and Public Health Engineering Departments; District Administration, Agriculture University, WAPDA, Industrial Estate; and Kala Dhaka staff. Project reports, correspondence, and other relevant documents were reviewed.

At the conclusion of the evaluation a facilitated workshop was held with important GOP and USAID officials. The participants verified the team's findings, clarified conclusions, reviewed recommendations, defined realistic implications, and identified future steps.

Findings

The findings of this evaluation were:

1. Poppy production has been virtually eliminated in the project area.
2. A remote tribal hill area has been brought into the mainstream of Pakistan's national economy.
3. Since 1986 the project has completed about 400 and begun another 600 sub-projects. These include:
 - a. 74 miles of roads;
 - b. 153 schools;
 - c. 9 health facilities;
 - d. 16 veterinary dispensaries;
 - e. 40 electrified villages;
 - f. 300+ irrigation systems;
 - g. 163 potable water supplies;
 - h. 50% increase in agricultural production due to high yielding crop varieties and fertilizer;
 - i. 2,000+ local residents trained in technical trades;
 - j. 3,000 local residents placed in new jobs; and
 - k. Rs. 400,000,000+ moved through the local economy because of subsidies, cash payments, and employment generation.

Conclusions

The conclusions drawn from these findings are:

1. A combination of enforcement and development--within a unique framework of cooperation between GOP and USAID--has been necessary and successful in eliminating poppy production.
2. The task of opening up the project area to development has been accomplished.
3. Crop subsidies, orchard and forest payments, and infrastructure development involving little or no community participation, have become a liability rather than an asset that have created a dangerous welfare syndrome that undermines rather than builds sustainability and self-reliance.

Against these conclusions, however, arise two others that pose a dilemma as phase-out proceeds:

4. The sustainability of most development activities, including the maintenance and operation of many facilities, is in jeopardy due to weak linkages with key line agencies and lack of active community participation at the beneficiary level.
5. Even with the completion of the 600 sub-projects now in the pipeline, many of which have benefitted relatively few people, the Gadoon-Amazai area will still lag behind the adjacent Swabi lowlands in terms of basic infrastructure and social services.

Recommendations

Based on these conclusions, the following recommendations are made:

1. Continue and accelerate the process of systematic phase-out of subsidies and major infrastructure development, consistent with completing the 600 approved sub-projects, in order to break the cycle of dependency before it becomes entrenched.
 - a. Reduce project and USAID Technical Assistance staffs;
 - b. Approve no new sub-projects under current guidelines;
 - c. Solve cash flow blockages between AID and Kala Dhaka insuring future flow through PACD; and
 - d. Phase out subsidies and protection payments.
2. Initiate a parallel but independent process of grassroots, self-reliant development built around sustainable village organizations that provide for broad-based community participation, including:
 - a. Involve recipients, GOP, and USAID in design and implementation of grass-roots, self-reliant development initiatives in the project area;
 - b. Identify, develop, and strengthen village development organizations (VDO's);
 - c. Provide staff training, methods, and resources to VDO's;
 - d. Develop integrated extension teams;
 - e. Approve sub-projects that include substantial self-help contributions;
 - f. Expand technical assistance for self-help sub-projects;
 - g. Develop and implement maintenance programs;
 - h. Strengthen agriculture and social forestry activities;
 - i. Combine training and job placement operations and activities; and
 - j. Provide access to credit and/or village savings programs for both men and women.

Lessons Learned

With the caveat that retrospective prescriptions are presumptuous for such a high-risk but successful project, three hypotheses merit testing in comparable future endeavors:

1. A social development component built around a village level organization scheme with more direct recipient involvement should be included from project inception.
2. The phase-out of subsidies should begin early, particularly if a social organization team is in place to facilitate the development of self-help activities.
3. The level of subsidies provided in this project should not be as high in future endeavors.

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ATTACHMENTS

K. Attachments (List attachments submitted with this Evaluation Summary; always attach copy of full evaluation report, even if one was submitted earlier; attach studies, surveys, etc., from "on-going" evaluation, if relevant to the evaluation report.)

COMMENTS

L. Comments By Mission, AID/W Office and Borrower/Grantee On Full Report

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