

L-0: 1

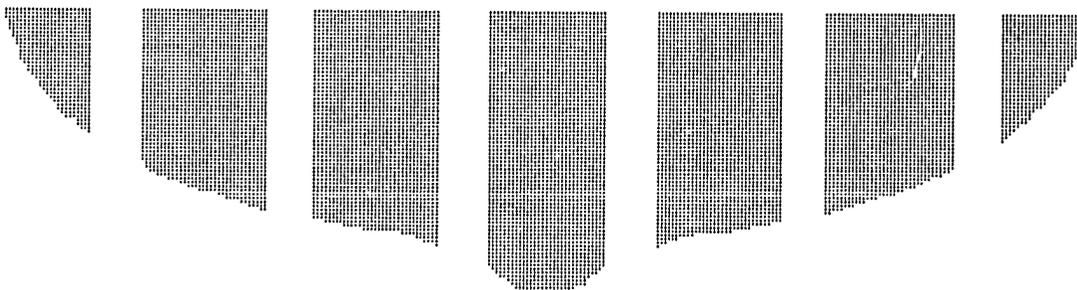
ISBN 94667

USAID

MISSION TO PAKISTAN AND AFGHANISTAN

**PROJECT ASSISTANCE COMPLETION
REPORT**

**Agricultural Sector Support Program
(391-0492)**



*Submitted by Agriculture and Rural Development Division
April 1995*

TABLE OF CONTENTS

	<u>Page</u>
List of Acronyms	
I. Basic Program Data	1
II. Program Goal and Purpose	2
III. Background	2
IV. Program Components	4
A. Sector Grant	4
B. Commodity Import Program	5
C. Training and Technical Assistance	5
V. Input	6
VI. Program Accomplishments	9
A. Sector Grant	9
B. Commodity Import Program	11
C. Training and Technical Assistance	12
VII. Lessons Learned	25
VIII. Sustainability	29

LIST OF ACRONYMS

ABC	Agribusiness Cell
ACE	Agricultural Commodities and Equipment Project (391-0468)
ACSCA	Analysis of Corporate Sector Constraints in Agriculture
ADC	Agriculture Data Collection
AED	Academy for Educational Development
APAP	Agricultural Policy Analysis Project
APCOM	Agricultural Prices Commission
ARD	Agriculture and Rural Development Division
ASF	Area Sampling Frame
ASSP	Agricultural Sector Support Program (391-0492)
CAMB	Center for Advanced Molecular Biology
CIELS	Center for Intensive English Language
CIP	Commodity Import Program
DAE	Department of Agricultural Engineering
DSTP	Development Support Training Project (391-0474)
EAD	Economic Affairs Division
EAN	Economic Analysis Network
EPA	Economic and Policy Analysis
EW	Economic Wing
FBS	Federal Bureau of Statistics
FFGI	Food and Feed Grain Research Institute
FSM	Food Security Management Project (391-0491)
FY	Fiscal Year
GMC	Grain Management Cell
GOP	Government of Pakistan
GRTSM	Grain Research, Training and Storage Management Cell
HEDP	Horticulture Export Development Program
IBA	Institute of Business Administration
IESC	International Executive Service Corps
IFPRI	International Food Policy Research Institute
KSU	Kansas State University

LIST OF ACRONYMS (Continued)

LOP	Life of Project
MINFA	Ministry of Food and Agriculture
MIS	Management Information System
MOD	Ministry of Defense
OIT	Office of International Training, Wasington
OY	Objective Yield
PAAD	Program Assistance Approval Document
PACD	Project Assistance Completion Date
PARC	Pakistan Agricultural Research Council
PASA	Participating Agency Services Agreement
PASM	Pakistan Agricultural Sector Model
PASSCO	Pakistan Agricultural Storage and Supplies Corporation
PC-1	A GOP planning document which sets forth funding for a development project
PDA	Provincial Department of Agriculture
PFD	Provincial Food Department
SG	Sector Grant
SPA	Senior Policy Advisor
SRD	Sam R. Danes
SSP	Special Studies Program
STDT	Storage Technology Development and Transfer
SUPARCO	Pakistan Space and Upper Atmosphere Research Commission
TA	Technical Assistance
TATA	Training and Technical Assistance
TIPAN	Transformation and Integration of Provincial Agriculture Network (TIPAN) Project (391-0488)
UAF	University of Agriculture, Faisalabad
UHT	Ultra High Temperature
USAID	United States Agency for International Development
USDA	U.S. Department of Agriculture
USG	United States Government
VMS	Village Master Sample

- 1 -

PROJECT ASSISTANCE COMPLETION REPORT
AGRICULTURAL SECTOR SUPPORT PROGRAM (ASSP)
(391-0492)

April, 1995

I. BASIC PROGRAM DATA

Program Title and No:	Agricultural Sector Support Program (ASSP) - 391-0492
Date of Authorization:	September 24, 1987
Date of Original Agreement:	September 24, 1987
Original PACD:	September 30, 1993
Revised PACD:	September 30, 1995
Pressler PACD:	March 31, 1995
Amount Authorized:	\$230,000,000
Amount Obligated:	\$230,000,000
Pressler Deobligation:	\$ 24,150,000
Other Deobligations:	\$ 4,324,855
Obligation (as of 3/31/95):	\$201,525,145
Amount Expended (as of 3/31/95):	\$200,709,590
Implementing Agencies:	<ul style="list-style-type: none">- Economic Affairs Division (EAD), Government of Pakistan (GOP), Islamabad- Ministry of Food, Agriculture and Cooperatives (MINFAC), GOP, Islamabad- Federal Bureau of Statistics (FBS), GOP, Islamabad- University of Agriculture, Faisalabad (UAF)- Four Provincial Food Departments- Four Provincial Agriculture Departments- Survey of Pakistan, GOP- Agricultural Engineering Department, Government of NWFP, Peshawar
Contractors:	Chemonics International; USDA; IFPRI; FFGI/KSU; Abt Associates; RONCO; SRD; IESC; and, AED
Project Officer:	Abdul Wasay
Project Managers:	Jalil Ahmad, Ahmad Jamil and Zakir Hussain

II. PROGRAM GOAL AND PURPOSE

A. Goal

The broad sector goal of the ASSP was to sustain economic growth in Pakistan through increased productivity in the agricultural sector.

B. Purpose

1. Provide balance of payments support to the Government of Pakistan (GOP) through commodity imports and sector grants.
2. Remove key constraints to increased economic growth in the agricultural sector through policy reform and expanded private sector investment and participation.
3. Strengthen the long-term capacity of the GOP in market based management of the agricultural sector and assist the GOP in developing the policy reform agenda.

III. BACKGROUND

Agriculture is the largest sector in the Pakistani economy, accounting for nearly one-third of the gross domestic product, employing over half of the labor force, and contributing approximately 50 percent of export earnings. In part, through the impact of the "Green Revolution" on domestic production of wheat and rice, Pakistan achieved self-sufficiency in both crops, with a small exportable surplus in some years. Later, Pakistan again became a net wheat importer as yield increases slowed down (1.6%) to less than the population growth rate (3.0%). In early 1980's the GOP moved progressively to implement a set of policies designed to promote more rapid development of the agricultural sector. These policies contributed to the steady rise in the production of the strategic crops of cotton, rice and sugarcane. As the agricultural system productivity was expanding to produce a surplus for the export market, policies based on improved economic analysis were to play a critical role in ensuring the efficient and productive use of the nation's resources. However, in general, the analytical research undertaken by existing public and private institutions varied in quality and relevance and was performed in isolation of the policy decision-making process. One of the major underlying constraints to improved economic and policy analysis was the absence of timely, accurate and reliable agricultural data.

As a result of the GOP policies in the agricultural sector, the majority of the off-farm grain storage facilities in Pakistan were in the public sector. The public sector grain storage network was characterized by significant grain losses, inefficient quality control. Since food grains were the lifeblood of the country, an efficient and reliable storage network was indispensable for Pakistan to meet its food security objectives.

The United States Government (USG) and the Government of Pakistan (GOP) entered into a renewed and strengthened effort in 1981 to increase their economic and development cooperation. High level USG-GOP consultations culminated in the negotiation of a \$3.2 billion package of military and economic assistance, which the USG agreed to provide to Pakistan between FY 1982 and FY 1987. The economic assistance component was designed to achieve the maximum development impact while providing as much support as possible to Pakistan's balance of payments. The economic assistance program sought to help Pakistan to fulfill the basic human needs of its people. At the same time, it was designed to address the country's foreign exchange needs through quick-disbursing activities that lay the foundation for economic growth and stability in the future. In 1982, USAID initiated the Agricultural Commodities and Equipment (ACE) Program which combined a fast disbursing program mechanism with policy conditionality to encourage the GOP to accelerate implementation of changes. The purpose of ACE Program was to increase the productivity of the agricultural sector through the provision of needed imported commodities and equipment and provide balance of payments support. In addition, the Food Security Management (FSM) Project (391-0491) was designed in 1984, in support of the objectives of the economic assistance program, particularly with respect to the need to address key economic problems and to complement multilateral initiatives. The purpose of the FSM project was to improve the analytical and policy formulation framework, the managerial capabilities and the physical capacity of the GOP to manage the national food security system effectively and efficiently.

Although both FSM and ACE projects made considerable progress and continued until 1991 and 1992, respectively, USAID felt the need to continue promoting policy change in Pakistan's agricultural sector and expand the institution building activities including in-country and U.S. training, strengthening of data collection and analysis units in the Ministry of Agriculture and other government units. With the result, the Agricultural Sector Support Program (ASSP) was designed in September 1987 to provide needed balance of payments support to the GOP and to lay the groundwork for sustained development by encouraging the adoption of difficult but necessary policy reforms in the agricultural sector. ASSP was built on the successful experience of the FSM and ACE, under which detailed policy analysis conducted under the FSM Economic Analysis Network component served as a catalyst for significant policy reforms, while the resource transfers being provided under ACE and PL-480 were leveraged to encourage their adoption and implementation. ASSP combined these two elements into a single program. The original Program Assistance Approval Document (PAAD) was authorized on September 24, 1987 with a planned obligation of \$600 million over a period of six years (\$300 million for ASSP-I and \$300 million for ASSP-II) with three major components being Commodity Import Program (CIP), Sector Grant (SG) and Training and Technical Assistance (TATA). It was planned that ASSP will finance detailed studies in the agricultural sector that not only identify key policy constraints, but also spell out the costs, benefits and means of implementing corrective reforms and then provide the financial support necessary to speed GOP agreement and implementation. The analytical studies were planned to be the first element in a policy dialogue followed by meetings and seminars with public and private sector participants to mobilize support for needed reforms. The policy dialogue and program support element of the ASSP was planned to follow

an annual cycle. The cycle was to begin with negotiation of a set of reform actions to be implemented in the coming year together with a level of program support divided between CIP and SG funds. The cycle was to continue through a mid-year assessment of progress to a final assessment toward the end of the year, which would then serve as the basis for the next year's negotiations and funding. Local currencies generated by the sale of CIP commodities and by private sector CIP were jointly programmed in support of the overall goals of the ASSP.

During 1990, due to budgetary constraints, the planned LOP funding level was reduced to \$335 million for ASSP-I only; ASSP-II was dropped. In reality, relatively the same policy reform actions in the agricultural sector were to be effected under the \$335 million as were originally envisaged under the two activities. The life of program was extended for two years on August 15, 1990, from September 30, 1993 to September 30, 1995, to allow successful completion of the program activities, including implementation of the policy agenda, and completion of needed Ph.D. training within the program time-frame.

The PAAD was amended to authorize additional funding before signing the Program Agreements with the GOP. Due to imposition of Pressler, the authorization/obligation was restricted to \$230 million as opposed to \$335 million and the PACD was reduced to March 31, 1995. In addition, several deobligations were made from ASSP which amount to \$28,474,855. Consequently, the program ended up with an obligation of \$201,525,145 against planned \$600 million. Following are the details of authorization of funds:

Original PAAD dated September 24, 1987:	\$5,000,000
Amendment # 1 dated September 29, 1987:	3,900,000
Amendment # 2 dated August, 4, 1988:	110,000,000
Amendment # 3 dated January 23, 1989:	50,000,000
Amendment # 4 dated September 25, 1989:	26,100,000
Amendment # 5 dated April 2, 1990:	10,000,000
Amendment # 6 dated August 23, 1990:	25,000,000
 Total authorized amount:	 \$230,000,000

IV. PROGRAM COMPONENTS

ASSP provided balance of payments, budgetary, and institutional development support to the GOP under three principal components: Sector Grants; a Commodity Import Program; and Training and Technical Assistance. These three integrated components established a firm basis for sustained agricultural growth through institutional and structural policy reforms.

A. Sector Grants

Sector Grants were in the form of direct cash transfers to (1) remove mutually agreed upon key constraints to increase economic growth in the agricultural sector through policy reform and

expanded private sector investment and participation; and (2) support GOP resource allocations to the agricultural sector. The cash transfers, placed in a dedicated account, were used by the GOP to finance its foreign exchange requirements. Local currency resources, generated by the cash transfers, were programmed by the GOP in cooperation with USAID to support implementation of policy and institutional reforms, and the GOP's overall sectoral development programs.

B. Commodity Import Program (CIP)

The CIP program was designed to finance importation of agricultural inputs; commodities and equipment needed to support agricultural production, processing and marketing; agricultural commodities required for local processing and consumption; and, machinery and raw material needed by the local agribusiness. This component of the program encouraged policy reforms specific to the imported commodities and equipment. Local currency resources, generated by CIP, provided budgetary support to the GOP and were programmed in cooperation with USAID to support implementation of policy and institutional reforms.

C. Training and Technical Assistance (TATA)

TATA was a project component of the program which had two distinct elements: a sectoral training program providing long- and short-term training to build up the research and training capabilities of Pakistani institutions in the agricultural sector and to expand the pool of skilled personnel available to the national agribusiness sector; and, technical assistance (long- and short-term) for policy analysis, data collection and institution-building begun under the Food Security Management Project (391-0491).

1. Training Program

The ASSP training program had two major components, both administered through Academy for Educational Development (AED), a U.S. contractor hired under Development Support Training Project (391-0474).

a. Public Sector Training

Long- and short-term training in the United States for university personnel and others in institutions supporting the agricultural sector, reinforced by short-term in-country training and visiting professorships for U.S. faculty in Pakistani institutions.

b. Private Sector Training

Long- and short-term training in the United States to upgrade the technical, professional, and administrative skills of individuals with a background in Pakistan's private

sector production, processing, and marketing sectors, as well as short courses in-country to reach a wider agribusiness audience.

2. Technical Assistance (TA)

The technical assistance included both long- and short-term. Under this sub-component, Economic and Policy Analysis (EPA), initiated under FSM project, was extended to provide support to the Economic Wing in the Ministry of Food and Agriculture (MINFA) to fulfill its new mission. The contract for EPA component was competitively awarded to Chemonics International Consulting Division. The International Food Policy Research Institute (IFPRI) provided technical services, under a grant agreement, for a Special Studies Program (SSP). In addition, Storage Technology Development and Transfer (STDT) sub-component, initiated under FSM, was also picked-up by ASSP to provide the human resource base necessary for improvement of the management and operation of grain storage facilities and to identify and apply more effective technologies for pest control. The Food and Feed Grain Research Institute of the Kansas State University (FFGI/KSU) was contracted to provide the technical services for STDT activities.

Agricultural Data Collection (ADC), also initiated under FSM, was extended to provide nationwide coverage to collect agricultural data through Area Sampling Frame (ASF) under a PASA with the U.S. Department of Agriculture (USDA). For promotion of agribusiness activities in the private sector, contracts were awarded to RONCO and Sam R. Danes (SRD). Apart from this, a PASA was signed with U.S. Bureau of Census to provide training and technical guidance to Statistics Division. TA was also provided for analytical support to MINFA to identify policy reforms areas and to enhance capability of Agricultural Prices Commission (APCOM) and Social Sciences Division of Pakistan Agricultural Research Council (PARC). This activity was awarded to the Abt Associates through a buy-in from the centrally funded Agricultural Policy Analysis Project.

V. INPUTS

A. USAID

ASSP was authorized on September 24, 1987 involving planned obligation of \$600 million over a period of six years (\$300 million for ASSP-I and \$300 million for ASSP-II). In 1990, the planned LOP funding level was reduced to \$335 million for ASSP-I only; ASSP-II was dropped; and the PACD was extended for two years from September 30, 1993 to September 30, 1995. Due to imposition of Pressler Amendment, ASSP sustained severe funding cuts. Its LOP amount, which was restricted to \$230 million, was further reduced by three deobligation actions as follows: \$19 million in May 1991; \$0.150 million in June 1993; \$5 million in June 1994; and finally \$4.325 million at close-out. Consequently, the program ended up with an obligation of \$201.5 million.

A summary of program obligation and expenditures over the LOP is set forth in the following table:

Line Item	Obligation (\$) (As of 03/31/95)	Expenditures (\$) (As of 03/31/95)
Sector Grants	80,000,000	80,000,000
Commodity Import Program (CIP)	81,367,933	81,367,933
Training and Technical Assistance (TATA)	40,157,212	39,341,657
Total:	201,525,145	200,709,590

1. Sector Grants

Three cash transfers for a total of \$80 million were made to the GOP during life of the program: \$50 million in FY 1988; \$25 million in FY 1989; and \$5 million in FY 1990. The sector grants were provided for the needed balance of payments support and to reinforce progress made in restructuring the agricultural sector. In turn USAID negotiated policy reforms with the GOP on an annual basis, based on review of priorities and opportunities in the policy arena.

2. Commodity Import Program (CIP)

Following is a summary of expenditures under CIP component:

a. Public Sector CIP	
- Wheat	\$59,162,000
- Bulldozers	4,368,000
- Bulk wheat handling equipment	188,000
Total:	63,718,000
b. Private Sector CIP	17,650,000
TOTAL CIP:	\$81,368,000

3. Training and Technical Assistance (TATA)

A summary of obligation and expenditures for TATA component over the LOP is given in the following table:

Line Item	Obligation (\$) (As of 03/31/95)	Expenditures (\$) (As of 03/31/95)
Training	23,921,384	23,921,384
Technical Services	12,255,213	11,528,759
Other	3,980,615	3,891,514
Total:	40,157,212	39,341,657

a. Training

Both public and private sector participant training in U.S. was administered through a buy-in to Academy for Educational Development (AED)'s contract under Development Support Training Project (391-0474). Following is the breakdown of funding spent on public and private sector training:

- Public Sector: \$16.0 million
- Private Sector: \$ 4.0 million

In addition to \$20 million spent on public and private sector participant training, funds from this line item were utilized for other training activities as part of technical assistance provided by several contractors.

Details of number of persons trained and other achievements are provided under Section VI "Program Accomplishments."

b. Technical Assistance

An amount of approximately \$12 million was spent on technical assistance. Major activities included: (i) Economic and Policy Analysis; (ii) Special Studies Program; (iii) Storage Technology Development and Transfer; (iv) Policy Analysis; (v) Agricultural Data Collection; and (vi) various agribusiness activities. Following are the details of technical assistance provided for each sub-component:

Sub-Component	Contractor	Person-Months		
		Long-Term	Short-Term	Local Profsnl
Economic and Policy Analysis (EPA)	Chemonics Int'l	69	40	57
Special Studies Program (SSP)	IFPRI	48	96	-
Agricultural Policy Analysis	APAP-II Buy-in	36	31	26
Storage Technology Development and Transfer (STDT)	FFGI/KSU	23	89	271
Agriculture Data Collection (ADC)	USDA - PASA	54	12	108
Agribusiness Activities				
- ACSCA	RONCO	48	48	256
- HEDP	SRD	41	13	15
- IESC				
Miscellaneous		-	20	-

c. Other

Funds under this line item were utilized for various activities, e.g., operational costs of Agribusiness Cell (ABC) and agriculture data collection activities; procurement of vehicles, computers and other small value items; and, logistic support of technical assistance contractors.

B. GOP

Ministry of Food and Agriculture, Federal Bureau of Statistics, Provincial Food Departments, and Provincial Agriculture Departments provided in-kind support through their staff and facilities for the implementation and completion of various ASSP activities. These staff persons were involved in the planning, implementation and monitoring of ASSP-funded activities.

IV. PROGRAM ACCOMPLISHMENTS

A. Sector Grant (SG)

This component was designed to redress the difficult balance of payments situation of Pakistan and encourage adoption of major policy reforms needed to accelerate agricultural growth. A set of policy benchmarks, each of which demonstrated progress towards reforms, was negotiated and implemented every year. The process was characterized by a joint

exploration of policy issues based on careful analytical work. To ensure a high level of policy analysis capability, Mission acquired services of a policy analyst for three years under a buy-in to a centrally funded Agricultural Policy Analysis Project-II (APAP-II). An annual reporting cable kept USAID/Washington informed on implementation status of the negotiated benchmarks and sought guidance on the following year's benchmarks and sector grant level. The policy reform program focused on: (a) reduction of price distortions and subsidies; (b) reduction of public sector competition with and regulation of private sector activities; and (c) institutional and management improvements. Major achievements in the policy reforms were as follows:

- o Subsidy in phosphatic fertilizers reduced from 37 to 9 percent and substantially reduced on potassic fertilizers.
- o Public sector recoveries of wheat storage and handling costs increased from 13 to 90 percent. State procurement of domestic wheat reduced from one-half to one-third the marketable surplus.
- o Private sector allowed to import corn. Duty eliminated.
- o Private sector allowed to export basmati rice in packets as well as bulk. Export duty eliminated.
- o Private sector allowed to export cheese and 50 percent of milk processed at Ultra High Temperature (UHT).
- o A truth-in-labeling law enacted. A bill on plant breeders' proprietary right was with the legislature.
- o Policy of zero interest rate on small agricultural production loans replaced with a system of recovering at least the administrative costs.

Three fourths of the targets set in the Program Assistance Approval Document (PAAD) were achieved within a period of three years (half of the originally planned time frame). The process of reformation continued despite stoppage of sector grants due to imposition of Pressler Amendment. Low key monitoring of implementation of policy reforms also continued. At the PACD, 83 percent of the targets were achieved. A listing of policy targets and achievement levels on a scale of 1-100 are given at Annexure I. In this numbering system, weights were assigned to specific areas of intervention to reflect their importance and Mission's priorities.

B. Commodity Import Program (CIP)

This was another quick resource transfer component of the Program that provided (a) balance of payments support; (b) budgetary support in the form of local currency; and (c) equipment and machinery for development activities.

1. Public Sector CIP**a. Wheat**

The Program financed import of 321 thousand metric tons of wheat during PFY 1988/89. These funds were originally planned for import of fertilizers but the GOP and the Mission agreed to reprogram these and ACE Program (391-0468) funds to import wheat in a crisis situation caused by a severe shortfall in wheat production. The wheat imports provided a direct balance of payments support of \$59.2 million and a budgetary support of Rs. 675 million from sale proceeds. These funds were programmed to finance GOP's development activities in the agriculture, health, and education sectors.

b. Bulldozers

Mission financed import of 114 bulldozers for the North-West Frontier Province (NWFP), Department of Agricultural Engineering (DAE). These were distributed to all district Agricultural Engineering Offices, from where these are rented out to farmers @ Rs 183 per hour for land levelling, terracing in the hilly areas, and building earthen structures to use hill torrent floods for irrigation. These bulldozers are being extensively used. Over a period of about two years, the average usage was over 4,380 hours per bulldozer, which is an excellent rate of utilization if compared with the normal 2,080 working hours per year.

c. Bulk Wheat Handling Equipment

This equipment was procured to carry out research, development, and demonstration of bulk wheat handling techniques on a pilot scale. The equipment included augers, grain pumps, drag conveyors, mixographs, load volumeters, sieve shakers, an experimental flour mill, phosphine analyzers, and many other items. The equipment was placed with the Punjab Food Department (PFD), Pakistan Agricultural Storage and Supplies Corporation (PASSCO), and University of Agriculture, Faisalabad (UAF). The provision of equipment played a significant role in furthering development and dissemination of bulk wheat handling techniques under one of the sub-components of the Program -- Storage Technology Development and Transfer (STDT) -- details of which would follow at the appropriate place.

2. Private Sector CIP

This sub-component was intended to ease the constraint of foreign exchange availability for the private sector. The private sector borrowed dollars through the participant commercial banks and repaid in rupees with interest. Proceeds in rupees provided budgetary support to Government of Pakistan (GOP) for development activities. Equipment and commodities worth \$ 17.7 million were imported. These included: an ammonia plant for a fertilizer unit; a seed processing plant; corn, sorghum, and sunflower hybrid seeds; power generators for textiles; and packaging materials for agricultural products.

C. Training and Technical Assistance (TATA)

1. Training

The ASSP Training Program had two major components, public sector training and the private sector training. The objective of training was to upgrade the pool of professional, technical and administrative skills of Pakistanis working in the agriculture sector. It placed equal emphasis on public sector professionals, focusing particularly on the faculties of agriculture and on the private agribusiness sector.

The main focus on the public sector training program was on Ph.D. and M.S. scholarships for faculty members of the two agricultural universities at Faisalabad and Tandojam. The third agricultural university in Peshawar, NWFP, received substantial training fellowships under another USAID project, the Transformation and Integration of Provincial Agricultural Network (TIPAN). Some other agricultural training and research institutions, or general universities having faculties of agriculture, also received Ph.D. and M.S. slots. Some post-doc training of about 12 months duration were also included.

A summary of the principal training outputs is given in the following Table:

Type of Training	Public Sector		Private Sector		Total	
	Male	Female	Male	Female	Male	Female
Ph.D	57	3	3	0	60	3
MS	110	7	12	4	122	11
Post Doc	14	0	0	0	14	0
Short-Term	157	3	276	27	433	30
TOTAL:	338	13	291	31	629	44

The training slots, offered each year, were identified in consultation with the cooperating GOP ministries, i.e., Ministry of Food and Agriculture (MINFA) and the Economic Affairs Division (EAD) in a training plan issued by USAID. The plan included information on the areas and duration of training, the number of training slots and the institutions for which the training slots were meant. The training plan was forwarded to EAD, which in turn advised all federal and provincial agencies of these training opportunities and invited nominations. These nominations, when finalized, were forwarded to USAID by EAD. This involved a rather long chain of provincial and federal agencies that some times caused delays as well as nominations of some not-so-qualified candidates. One big stumbling block in the selection of suitable candidates in the agriculture and agribusiness related fields turned out to be the inability of a majority of candidates to meet the English Language requirements. This problem was resolved, to some extent, by special supplementary English Language Programs run by the Center for Intensive English Language Study (CIELS) at the Academy for Educational Development (AED), Islamabad and by the Center for Advanced Molecular Biology (CAMB), Punjab University and the Institute of Business Administration (IBA), Karachi University. The CAMB and IBA programs were meant for Balochistan and Sindh candidates and also included training in some other subjects like basic science and computers, in addition to English. The placements and monitoring of participants was done by AED.

All in all, ARD's training initiatives were generally well targeted and well received by the public as well as the private sectors. This was evident from the evaluations which were conducted by the AED as well as in some get-togethers organized by ARD with the returnees. The private sector agribusiness training program, in particular, attracted the attention of major agribusiness concerns and many of its participants were drawn from key agribusiness fields like marketing, packaging, food processing, horticulture etc.

One major issue in the whole process was the time taken between the identification/nomination of a candidate and his/her actual departure for training. In the public sector, it was partly due to the long nomination process mentioned above. To some extent, the sequential steps to be completed in order to meet the Handbook 10 requirements and case handling by the training contractor also resulted in delays. It was felt that the placement of participants from technical areas like agriculture was better done by a University as its professors exercise some sort of leverage with other academic institutions. This impression was reinforced by the TIPAN experience where the University of Illinois served as the placement facilitator. Many of the long-term participants under ASSP were forced to try for self placements and were successful where the contractor was not able to secure admissions.

Overall, ASSP training program was very successful and it contributed significantly to building and strengthening Pakistan's human resources pool in the agriculture sector, both public and private.

2. Technical Assistance

a. Economic and Policy Analysis (EPA)

The primary objective of the EPA sub-project was to strengthen the analytical capabilities of the Ministry of Food and Agriculture (MINFA) and to provide a well defined and sound institutional framework for conducting high quality economic and policy analyses of the priority policy issues in the agriculture sector. The EPA activity originated under the Food Security Management Project (391-0491) which ended in June 1990 and the ASSP picked it up to complete the institutionalization process. Chemonics International provided the technical services.

An Economic Wing (EW) within the MINFA was formed in July 1990 by merging the Planning Unit of MINFA and the Directorate of the Economic and Policy Analysis Project. The EW now has a staff of 39 professionals with sufficient training and skills to carry out economic and policy analyses without expatriate technical assistance. All professionals have computers and the needed software. The major achievements of the sub-project, which helped GOP to implement more rational, long-term policies in the agricultural sector, were as follows:

- o Management Information System (MIS): A computerized MIS has been developed consisting of annual work plans, purpose statements, job descriptions, job skills inventory and training plan, and computer acquisition and maintenance plan.
- o Training: Five professionals obtained master degrees from the U.S. On-the-job training of 200 person months was provided to staffers on situation reports, farm income and budget analysis, agricultural data systems, input/output and agricultural sector models, and computer usage.
- o Data Bank: An agricultural data bank called AGDAT was developed. It consisted of (a) PAKSTAT - including production and price data specific to Pakistan; (b) PS&D - a USDA database containing supply and utilization time series for major traded crops and for all countries of the world; and (c) AGROSTAT - an FAO database on population, land use, agricultural inputs, production, supply, utilization, and food balance sheets for most countries of the world. The databases are updated regularly.
- o Models: Developed an 18-sector input/output model for Pakistan's food and fiber system; and updated and improved the Pakistan Agricultural Sector Model (PASM), originally developed by RONCO Consulting Corporation under another sub-component of the Program.

-
-
- o Studies and Research Papers: Against a target of 18 studies, 115 were completed. Most of these studies were published and widely distributed. A bi-monthly newsletter 'Econogram' was sent to some 450 economists and entities who are members of the Economic Analysis Network (EAN).

b. Special Studies Program (SSP)

This sub-component was also carried on after the completion of FSM Project. It was designed to conduct policy analysis on selected topics. A 15 round panel survey and seven studies were planned under this sub-component. The International Food Policy Research Institute (IFPRI) provided technical services under a grant agreement. The achievements were as follows:

- o In collaboration with Pakistani researchers, a 15 round panel survey of rural households in the selected districts (initiated under the FSM Project) were completed. The survey was conducted in Faisalabad and Attock districts of Punjab, Dir district of NWFP, and Badin district of Sindh. The survey collected high quality longitudinal data covering virtually all aspects of socio-economic parameters, and production and distribution systems in the rural Pakistan. This was the only data set in Pakistan that permitted analyses of the dynamic aspects of poverty, income growth, and food security. The data was extensively used by IFPRI in its research reports and papers, Pakistan's economic research institutions, and individual researchers. Twelve Ph.D. candidates in the American universities (eight Pakistanis and four others) used this data set in their dissertation research.
- o Produced seven research reports; nineteen journal articles; one book; six chapters in books; and mimeographed reports. These reports and studies were conducted by staff drawn from all research divisions within IFPRI, leading academics from the U.S., Australian, and Pakistani universities; and local senior policy analysts. The major research reports were on the following topics:
 - The Demand for Inputs and Supply of Agricultural Output in Pakistan
 - Agricultural Price Policy
 - The Effects of Internal and International Migration and Remittances on Income Distribution in Rural Pakistan
 - Markets for Irrigation Water in Pakistan
 - Risk Patterns of Rural Households
 - Credit Markets
 - Technical Skills in Agriculture
- o IFPRI collaborated with the Department of Economics, Quaid-i-Azam University, Islamabad to jointly supervise over 100 Master and M.Phil degree dissertations.

- o Trained 60 young professionals, half of them females, in the science and art of socio-economic data gathering, data compilation, and analyses using computers. Services of these professionals were extensively used by other national and international agencies in conducting their surveys.

The number of studies considerably exceeded the planned list for the life of project. Several of these studies and reports, together with associated workshops and policy dialogue under the Sector Grant component, have been instrumental in changing the direction of the policy focus in Pakistan agriculture.

c. Agricultural Policy Analysis Project (APAP-II) Buy-In

To help implement the Sector Grant component of the Program, Mission entered into a buy-in arrangement with the USAID/Washington's Agricultural Policy and Analysis Project-II (APAP-II). The primary purpose of the APAP buy-in was to augment Mission's in-house capability in developing policy benchmarks, dialogue with the government, and monitoring of implementation of agreed upon policy reforms. Specifically, the buy-in included (a) provision of a senior policy advisor to assist in policy analysis and dialogue; (b) a series of policy studies; and (c) in-country training of GOP economists involved in policy analysis.

A long-term Senior Policy Advisor (SPA), from the Abt Associates, served as Mission's key resource on development of policy agenda, negotiations, and monitoring of policy actions. SPA's participation in the whole process was a plus point and proved to be very effective in fostering Mission's objectives under the SG component of the Program. The SPA helped Mission in evolving yearly policy agenda for dialogue, analyzed the issues, participated in the dialogue, and monitored implementation of benchmarks. His constant interaction with the Mission staff, other TA teams, counterparts, professional institutes, and other donors enabled the Mission to get needed information at the right time, ensured participation of other AID-financed TA teams, and resulted in increased responsiveness of the policy making technocrats in the GOP.

Under the buy-in, the following studies were carried out:

- Edible Oil Policy
- Policy Analysis Capacity Building
- The Cotton Economy of Pakistan
- Livestock Feed
- Constraints to Agribusiness
- Wheat Policy
- Rural Land and Labor Markets
- Sources of Agricultural Productivity

In addition, the following training activities were conducted under the buy-in: a one-week training to Agricultural Prices Commission (APCOM) staff on cost of production and pricing theory; and, a three-weeks training on teaching of policy analyses to university teachers, researchers, and analysts of the EW/MINFA. The SPA also provided occasional consultancy to the professional staff of the APCOM and a very specific on-the-job training to the EW staff on development, updating, and use of producer and consumer subsidy equivalents (PSEs and CSEs).

d. Storage Technology Development and Transfer (STDT)

This was another sub-component that continued under the ASSP after completion of the FSM Project. The purpose of the sub-component was to continue to provide the human resource base necessary for improvement of the management and operation of grain storage facilities and to identify and apply more effective and safer technologies for pest control. Another major activity was a pilot scale testing and demonstration effort on bulk storage and handling wheat. The Food and Feed Grain Research Institute (FFGI) of the Kansas State University (KSU) provided the technical services. Highlights of achievements are as follows:

- o Two six-week courses for master trainers were arranged in the U.S. The first course related to bulk wheat handling techniques and 14 persons were trained. The second course on grain grading was attended by 12 participants. Eighty one in-country courses, seminars, and workshops were held which provided training on bulk wheat handling, fumigation, pest management, grain drying, and flour milling, to 2,877 persons from Provincial Food Departments (PFDs) and PASSCO.
- o A training manual, developed earlier under the FSM Project, was revised to include illustrations and new recommendations from later STDT research and bulk handling experiences.
- o Technical support was provided to four private sector flour mills in design and installation of bulk handling capacities totaling 27,000 metric tons. Assistance also included guidance on fumigation and vertebrate pest control.
- o Adoption of new cleaning techniques and sale of bulk wheat at GOP stores enabled initiation of a premium price system.
- o A grain milling school was created at University of Agriculture, Faisalabad with the cooperation of the private sector. USAID provided grain milling, processing, and quality control equipment.
- o University of Agriculture, Faisalabad initiated courses in grain storage and management. The first training course began in October 1992 with enrollment of 14 persons, including 8 from the private sector.

Results of the policy research and development activities were extensively used in policy dialogue under the Sector Grant component of the Program. To institutionalize the STDT activities, two cells were created -- Grain Management Cell (GMC) within the Punjab Food Department (PFD) and Grain Research, Training and Storage Management (GRTSM) Cell at the University of Agriculture, Faisalabad. Their respective achievements were as follows:

(i) Grain Management Cell (GMC)

The Cell continued the training, research, development, and application of the new techniques initiated under the STDT. Training was provided to 23 trainers and 231 other technicians and managers. Against a target of 25,000 metric tons bulk wheat handling in 1993, 75,000 metric tons were handled in bulk. In 1994, the quantity increased to 150,000 metric tons against a target of 100,000 metric tons. Research and demonstrations on grain protection continued with assistance from the PARC and GRTSM/UAF. The GMC continued its activities after completion of USAID funding in June 1994. For PFY 1994/95, the cell planned to procure additional bulk handling equipment; increase bulk handling to 200,000 metric tons; train 10 master trainers and 100 technicians; and, continue research and development.

(ii) Grain Research, Training, and Storage Management Cell (GRTSM)

The grain research laboratory was renovated and upgraded with the latest research equipment. Eleven research projects were initiated in fields of pest resistance to phosphine and other protectants, ecology of grain losses, comparison of different storage structures, economics of bulk wheat handling, and other related topics. Four of these were completed by the PACD and the rest are underway. To disseminate the research findings and facilitate transfer of technology, a bi-annual newsletter on Grain Storage Management was initiated in January 1994. It was widely distributed to researchers, storage managers, and flour millers in the private sector. A two semester diploma course in grain storage management was initiated. Along with the research and education, an outreach program was launched. Three one-day workshops were held in Faisalabad, Toba Tek Singh, and Jhung districts to demonstrate new pest control techniques to PFD staff. Three workshops were organized for farmers and rural women in collaboration with the National Rural Support Program to train them on preservation methods for their own wheat stocks. The Cell has been institutionalized and is continuing its operations with UAF's own resources.

e. Agriculture Data Collection (ADC)

This component was designed to improve the system for collection of basic agricultural data, using Area Sample Frame (ASF) methodology, developed by the U.S. Department of Agriculture (USDA), to make it more reliable, timely and cost effective. The Phase-II of ADC sub-project was conceived to develop a national agricultural data collection system for five major crops.

The main objectives of the ADC sub-project were to: (i) implement ASF technology for collecting basic agricultural survey data on crop area, yield and production; (ii) construct a nation wide ASF representing the entire land area without omission or overlap; (iii) provide a regular and consistent data collection system of reliable and timely statistics on agricultural production; (iv) strengthen data processing capabilities of relevant federal and provincial agencies to use ASF design, sampling, survey data processing and analysis and data retention; and ultimately, (v) modify/replace the Village Master Sample (VMS) based survey system with ASF based system.

The ADC sub-project achieved varying degrees of success in its major objectives. The main goal of building a national ASF was completed, although it took longer than planned. A system of regular and consistent agricultural surveys that deliver accurate and timely information about crop area and production is in place. With quality statistics available, better economic planning (at least in the agricultural sector) can be achieved and resources allocation can be improved. The training component produced a broad base of expertise in ASF methodology, survey techniques, survey administration, data processing & analysis and management of a scientific statistics system. However, the key objective of installing the ASF methodology as a modification of the existing agricultural statistics system is not yet complete. All of the mechanisms and facilities are in place for putting the new system in full operation. The decision on future continuation rests with the GOP. The following paragraphs provide a chronology of accomplishments:

- o The application of ASF technology was a new concept for statistics organizations in Pakistan. The Director General, Federal Bureau of Statistics (FBS) and various Provincial Department of Agriculture (PDA) officials were introduced to operational ASF systems during observation tours to the U.S. in the 1980's. The application of ASF technology was introduced steadily to a wide range of GOP officials over the life of the project.
- o Frame construction for the seven pilot districts used low level aerial photography as the stratification medium. Photo mosaics equal in size to one 1:250,000 topographic map were constructed by hand using 1:30,000 low level aerial photography. Count units were drawn on the photo mosaics and transferred to topographic sheets. Although the photography was rapidly becoming out dated because of changing land use patterns it was of good quality and resulted in a highly accurate frame. However, this procedure was time consuming and expensive and photography of this quality was available for only 14 districts.

Later, with the GOP approval to proceed for national ASF design and the coming on line of the Pakistan Space and Upper Atmosphere Research Commission (SUPARCO) SPOT receiving station in Islamabad, the frame construction procedures were changed. SPOT satellite imagery provided the land use stratification medium and count units were drawn directly on the topographic sheets.

-
- o With the highly mechanized laboratory facility installed at FBS, a well trained and experienced staff and a steady flow of SPOT imagery from SUPARCO, frame construction proceeded at a rapid pace and frame construction of the national ASF was completed in December 1992.
 - o A series of regular surveys, approximately on a quarterly schedule, for crop area measurement began in the pilot districts and expanded to the provinces as each provincial ASF was completed.
 - o The frame construction, sampling, data processing and data analysis work in the FBS required enhanced computer power. Microcomputers installed in the project coordinating offices provided data entry. Eighty-five microcomputer systems were delivered to the GOP during the life of the project. Forty-five were used in direct support of project activities and forty were used in related activities at educational institutions and other GOP agencies.
 - o The foreign non-degree training provided exposure for GOP and provincial governments officials to the U.S. agricultural statistics system through study tours, observation tours and internships. Short courses in the U.S. provided technical instruction in statistical methodology and survey techniques.
 - o Seminars, workshops and short courses offered a wide variety of instruction in basic statistics, sampling, survey methodology, data collection and processing, data analysis and statistical systems operation. Field enumerators received intensive training in data collection procedures and survey operations before each field survey. Support was given to the establishment of PISTAR through consultation and the provision of training equipment including microcomputers and visual display teaching aids. This activity supported the overall goal of strengthening the agricultural statistics expertise of the GOP and provincial governments.
 - o Another significant achievement of this component was the institutional development of ADC cell within the Federal Bureau of Statistics (FBS) which is now capable of implementing ASF design independently at national level. At provincial levels, the ADC project offices were adequately equipped with data processing facilities and the project related field force and supervisors were properly trained through periodic training schools, foreign training programs, locally arranged workshops and periodic pre-survey training schools.

Implementing constraints

(i) **ASF Methodology** - Reliance upon the revenue based VMS and Gardawari system proved to be the hardest obstacle to overcome in introducing ASF technology. The Gardawari and VMS, based on Patwari revenue records, are inefficient, biased, untimely and provide questionable results. Despite these shortcomings the system has been in place many years and is well entrenched. Provincial governments which have constitutional responsibility for basic statistics on agriculture possess a keen sense of ownership of the system. The PDA officials felt threatened by the ASF technology and never fully supported the project. The PDAs were also apprehensive that the FBS might supplant them as the primary agricultural data provider. Moving away from the highly inefficient VMS based crop cutting experiments presented a similar challenge. Major stated objections to the objective yield (OY) centered around its small field plot size. Despite repeated research efforts that proved the methodology to be statistically sound, it was not accepted. In reality, the concern was about losing control of the system.

(ii) **ASF Construction** - Getting ready access to the mapping materials necessary for land use stratification posed the most challenging problems in ASF development. The difficulties experienced in dealing with the Ministry of Defense (MOD) delayed ASF completion by two years.

(iii) **Survey Program** - The inability to establish provincial project coordinating offices and pay the salaries of field staff in a timely fashion were the major obstacles faced in establishing a systematic series of field surveys and keeping them on a predetermined schedule. It was not until late 1992 that the last province appointed a project coordinator independent of the existing structure.

(iv) **Cash Flow** - Because of a highly complex and multi-channelized approval system of GOP, provincial field staff had sometimes worked six months without receiving their salaries. The slow payment of salaries and other expenses no doubt contributed to the PDAs disdain for the project.

(v) **Operational ADC** - Efforts to establish an operational, smooth running of ADC activities suffered from the lack of high level GOP support and the poor working relationship between the FBS and the PDAs. FBS had no authority to influence the PDAs in this regard and, therefore, merely accepted what was provided to them by PDAs.

f. Agribusiness Activities

In response to the GOP's increased emphasis on agribusiness, the Mission provided considerable support for the promotion of this crucial sector of the economy. Within the agriculture portfolio, agribusiness was a priority area. Support for agribusiness development

was in line with USAID's policy on the promotion of private sector expansion, one of the three central objectives of the ASSP policy. Some of the major initiatives undertaken for agribusiness development and their accomplishments were as follows:

(i) Analysis of Corporate Sector Constraints in Agriculture (ACSCA)

ACSCA was a major two year effort implemented by RONCO as the prime contractor and Agri-Bi-Con as the local sub-contractor. It was envisaged that the policy dialogue with the Government can be substantially strengthened and accelerated by the availability of detailed analysis of complex issues, particularly such analysis that generates reliable data to replace speculation and offers specific information on the costs and benefits of the particular policy measures. The project undertook a number of major case studies that helped bring about a discernible shift in government agribusiness policies towards liberalization of restrictions and increased support to the private sector. The six agribusiness industry research reports were prepared in the following sub-sectors:

- Farm Machinery and Implements
- Fertilizers and Farm Chemicals
- Seed Production and Distribution
- Edible Oils Manufacturing
- Food Processing
- Livestock feed

The above six reports were consolidated in the agribusiness industry case study report. This comprehensive report summarized the findings of the sub-sector research reports, focusing on common policy, regulatory and bureaucratic constraints affecting agribusiness growth and provided the basis for the recommendations for the National Agribusiness Action Plan.

The research studies carried out under ACSCA were a pioneering effort in the direction of collection and documentation of economic data relating to agribusiness. In addition to conducting these case studies, a number of symposia, workshops and seminars were organized to encourage nation-wide participation of public and private sector representatives in providing input and recommendations for the National Agribusiness Action Plan.

(ii) Horticulture Export Development Program (HEDP)

This was an innovative program which was designed to stimulate the cultivation and export of high value, non-traditional crops. The implementation of the project by the contractor, SRD, (Samuel R. Daines Research Corporation) left much to be desired. Nevertheless it did succeed in initiating some successful ventures like strawberry and asparagus cultivation. Although not a substantial amount could be exported due to procedural bottlenecks, natural calamities like aphids, inexperience of the farmers in export oriented post harvest handling, lack of proper and qualified TA experts, and a local demand for the products, the

farmers did pick up the idea and strawberry in particular has been cultivated in many areas with fairly good results. The demonstration activities generated considerable interest with the government circles who became more aware of and receptive to export oriented farming.

The project implementation suffered because of many reasons. Firstly, the contractor did not appoint a full time expatriate Chief-of-Party in Pakistan which resulted in a lack of management control. This placed more management burden on the Mission staff than was desirable in a project of this nature and size. Another reason was the marginal involvement of the GOP counterparts in the project activities. Lastly, the Mission should have thoroughly evaluated the performance of the contractor in the first phase of implementation before extending the project.

(iii) International Executive Service Corps (IESC)

The International Executive Service Corps (IESC) was provided a grant to finance consultancy services to Pakistan's corporate sector. It completed over 100 projects in the field of agribusiness, construction, printing, chemicals, finance and business education. The objective of IESC-assisted projects was to help locally owned private enterprise, government utilities, social welfare, educational, health care and other organizations to increase their productivity. Many agribusiness concerns benefitted from IESC's advisors, research services, and access to Trade and Investment Service. An evaluation of IESC's operations indicated mixed response by the clients. Overall a majority of clients reported satisfaction with the advise provided by IESC volunteer executives.

(iv) Agribusiness Cell (ABC)

As a result of recommendations of the ACSCA studies, an Agribusiness Cell (ABC) was established in the Ministry of Food and Agriculture (MINFA). ABC's main objective was to stimulate and support government initiatives in promoting private agribusiness. The specific objectives of the ABC included:

- development of agribusiness data and resource materials
- promotion of local and foreign private investment in agribusiness
- provision of investment enabling services to local and foreign investors
- serve as a catalyst in the collaboration between the public and private sector to expand Pakistan's international agribusiness investments, and
- advise MINFA and other Pakistan governmental agencies on policies, procedures and incentives needed to stimulate Pakistan's agribusiness development.

This was a unique and, to a great extent, novel experiment in institution building. The cell was housed within the bureaucratic set up to influence policy making. ABC initially faced considerable resistance as the GOP officials saw this as an alien and foreign entity, not aligned with the bureaucratic culture and values. However, with a more appreciative senior management, the ABC became to be seen as a useful instrument that could assist the private sector and the government in forging ahead agribusiness growth. It did help in facilitating contacts between the public and private sectors and in promoting the ideas of joint ventures between local and foreign parties. The experience of setting up of ABC showed that the government officials need to be provided a better appreciation of the need to interact and respond to private sector demands and concerns if the agribusiness is to flourish. With increased awareness, such institutional set up would have a greater measure of sustainability. The GOP has decided to retain the institution, and is determined to find alternative funding source(s) to keep it functioning.

(v) Tomato & Potato Processing Opportunities in Pakistan

USAID hired a U.S. consultant, Robert K. Swanson, to explore the Tomato and Potato Processing opportunities and to try to introduce multinational food processing firm to these opportunities. The ultimate objective of the exercise was to enable multinationals enter into some sort of joint venture arrangements with Pakistani entrepreneurs interested in food processing. The consultant's report was circulated to a number of multi-national food processing companies and a considerable interest was generated. However, uncertain investment climate in early 1994 precluded the chances of visits by the representatives of the multinationals to Pakistan for further discussions. These circumstances scuttled the project activities and no headway could be made with regards to joint venture development. However, the study sensitized many Pakistani entrepreneurs to look into this lucrative and prospective area where investments could yield substantial results. The Agribusiness Cell was further pursuing the idea with some food processing companies.

g. Environmental Docu-Drama

To increase awareness about environmental issues in Pakistan, USAID used ASSP and PDIF (Project Design and Implementation Fund) funds to work with the Pakistan Television Corporation for the production of an environmental docu-drama -- Before It's Too Late. The main objective of this sub-project was to increase awareness of the extent and nature of environmental problems in Pakistan and to increase awareness of the need to maintain environmental quality and biological diversity in order to sustain development initiatives. After extensive research work by travelling through out the country, a highly qualified team successfully produced the documentary film. Testing showed that the film increased the awareness of the Pakistani populace about environmental issues and what they themselves can do to help conserve and enhance Pakistan's natural resources and its delicate environmental and ecological system.

VII. LESSONS LEARNED

A. Sector Grant

- **USAID Missions implementing a policy reform agenda must have a high level of policy analysis capability available to them and persons responsible for analyses should not have project implementation responsibilities, because the pressure of implementing project activities often takes precedence over analyses. USAID/Pakistan found it fruitful to have an analyst, under the APAP-II buy-in, who did not have any other implementation responsibilities.**
- **A "zero" sector grant option should be a part of the design. USAID/Pakistan's leverage for compliance on agreed upon policy benchmarks was limited because of the promised multi-year package of assistance. Mission could shift sector grant money to a CIP or project activities, but there was no "zero" option.**
- **Complementarity of training and technical assistance was useful. Technical and negotiating meetings helped in identifying deficiencies of expertise in the MINFA. Targeted training and supplementary analyses by TA teams (Chemonics, KSU, IFPRI) made policy dialogue more productive.**

B. Commodity Import Program

- **Flexibility in the design was helpful in meeting emergency imports. The Government of Pakistan made a special request for financing wheat imports because of a production shortfall in 1988. Whereas wheat import did not have any direct developmental effect (fertilizer imports would have had), it created a lot of goodwill that was helpful in implementation of policy reforms and project activities.**

C. Training and Technical Assistance (TATA)

1. Training

- **The USAID staff should work closely with cooperating institutions to get quality candidates nominated. The quality of nominations was much better of the institutions where USAID staff worked in close collaboration with the officials responsible for identifying and nominating candidates as opposed to the agencies who nominated their candidates at their own.**
- **The selection process should be competitive for public as well as the private sectors. The ASSP public sector nomination process was not competitive and the government regulations allowed such candidates to be nominated who would not have been selected if merit was the only criterion.**

The competitiveness could be introduced by persuading the GOP to make changes in the regulations to allow merit as the only criterion of selection, and by introducing a procedure of selection in which the training slots were more widely advertised (through press or other means). USAID can play a more proactive role in a system of competitive selection. This was done with much better results in the private sector agribusiness scholarship program.

- **The private sector agribusiness training program should focus on some critical areas.** The private sector training program was competitive, but was spread over too many areas. Although over 300 individuals received training under this program, it is difficult to measure its effects on any one particular aspect of agribusiness. It would have had more visible impact if it targeted some selected areas like dairy, poultry, aquaculture, packaging, etc. Such focussed training may have resulted in developing a core group of trained participants who could have played the role of change agents and the resulting improvements would have been more measurable.
- **More of in-country training should form a part of the program.** Umbrella projects like ASSP, should have more of in-country training which is cost effective, and in most cases, more relevant to the local needs. In-country training program could also help in identifying suitable candidates for foreign training. Apart from these benefits, such programs help in building and upgrading local institutional capabilities to impart training.
- **Private sector representative institutions be associated in the selection process.** The active involvement of the representative bodies like Federations, Associations, Chambers, etc. can help in ensuring better selection. This could also provide for a greater dissemination and sharing of information and knowledge upon return of trainees as these institutions could serve as forums for exchange of ideas. Post-training follow up activities should be encouraged and supported by the Mission as they could have a multiplier effect and enhance return on our investments in training. Under ASSP, the Federation of Chambers of Commerce and Industry was invited to participate in selection interviews for the last batch of scholarship candidates and was very helpful in ensuring the industry perspective. Some post-training get to-gathers organized by the Mission were also well received and should have been more effective if they were started early on.
- **More emphasis should be paid on the development of institutional linkages.** In a training program of ASSP magnitude, involving educational institutions, an effort should have been made to develop linkages between the U.S. and Pakistani agricultural institutions. This was tried under TIPAN and resulted in exchange of faculty and consultants on a regular basis. Such a relationship can

have a long-term effect on the quality of instruction and can help improve the management of institutions.

- **For long-term, academic training, some university/ies in the U.S. be associated to serve as placement facilitator rather than a general placement contractor who can be more effective for short-term training placements or on-the-job training of non academic nature. The contractor sometimes was not able to secure placements for M.S. and Ph.D. candidates or the selection of institutions was not very appropriate. Such an arrangement under TIPAN was found to be more effective than the AED arrangement.**

2. Technical Assistance

- **Financing of operational costs should be phased-out and government's funding phased-in gradually rather than a sudden stoppage of donor financing at the end of the project. A sudden incremental burden is more painful for the government than gradual and smaller increments. The Economic Wing and Agricultural Data Collection activities are facing such situations.**
- **Whereas pilot level demonstration or testing activities help in establishing the viability of a new technology, their full usage and institutionalization can take a longer time than expected because of (a) lack of government resources; (b) resistance to change in the system; and, (c) departmental rivalries, etc. The pilot level bulk wheat handling technologies and ASF technique for agricultural data collection have been well tested and are feasible but their full institutionalization will still take some time.**
- **Clearances from security conscious government agencies must be obtained at the project design stage. The Ministry of Defense clearance for ASF development under ADC component took more than 30 months which caused a considerable delay in project implementation.**
- **Insufficient delegation of authority with GOP project managers leads to delays and sometimes lapses force adoption of sub-optimal alternatives. This kind of situation was encountered under ADC component, particularly at provincial level, which hindered project implementation and caused considerable delays.**
- **Detailed industry studies and analyses of complex issues can help in policy dialogue with the government. The data generated through such research efforts can offer specific information on the costs and benefits of particular**

policy measures. The ACSCA studies were helpful in carrying out a meaningful discussion with the host government on different agriculture policy decisions such as withdrawal of subsidies on fertilizers; elimination of duties on import of corn and export of basmati rice; reduction of public sector competition with and regulation of private sector activities; and institutional and management improvements.

- **The host government officials should be actively involved in major donor-assisted activities, even when the projects relate to development of private sector.** The Horticulture Export Development Project (HEDP) failed to involve the GOP counterparts to the desirable extent. A dialogue and constant interaction could have increased public sector support to private sector initiatives.
- **The major AID-financed contractors should have a full-time resident expatriate supervisor to carefully monitor and guide implementation.** During the implementation of HEDP, the contractor, SRD, tried to carry on the activities without the services of a long-term Chief of Party. The project could have performed much better with closer supervision and monitoring. During the extended phase of the project, an attempt was made to overcome this shortcoming through the appointment of a full time local representative. However, the damage had already been done, and even this measure could not salvage the project which had to be prematurely terminated by USAID.
- **The host government officials should be briefed/sensitized fully to the benefits of different project related activities, especially while creating new institutions.** Without such preparation, these efforts are not likely to be owned by them or would face hostile reactions. The ABC's acceptance by the GOP middle management was marginal at best. This was partly because of a lack of salesmanship on part of the TA team which housed ABC before it was turned over to the Government. This resulted in the key GOP officials not mentally prepared to accept a new institution whose objectives did not match their understanding. Another reason for the initial resistance that the ABC had to encounter was the withdrawal of TA team when it was most needed. One would assume that any new institution like ABC should be provided the technical backstopping for at least 4-5 years so that it could become firmly established.

VII. SUSTAINABILITY

A. Policy Reform

The ASSP Program's focus on sector and structural reforms holds long-term prospects of sustainability. The primary reason for this is that the ASSP reform agenda included many features which replicated the conditionalities of the IMF, the World Bank and other bilateral donors. By influencing policy reform, this program was well on the way to moving agricultural production toward a market driven, and therefore sustainable, regime. The "carrot" of policy-based disbursements resulted in reduced wheat and fertilizer subsidies, saving the public sector some \$100 million a year. USAID made three sector grants to GOP in FY-88, FY-89 and FY-90 for a total of \$80 million. With the imposition of Pressler Amendment, this balance of payments type support was suspended. However, we kept the policy dialogue alive which offered a ready forum for us to add our voice to those counseling reform. The GOP has moved aggressively and courageously to address difficult agricultural policy issues and has succeeded in carrying out a number of major reforms. Despite this progress, additional reforms are needed to complete the transition to a market-based agricultural sector where the government limits its involvement and relies on the private sector to carry out majority of input supply, product marketing, processing and distribution functions. These reforms are expected to continue by the GOP itself and with the conditionalities attached to IMF and World Bank loans.

B. Training

No investment pays greater returns toward sustaining growth and development in a country than the enhancement of skills of its human capital. ASSP contributed significantly to building and strengthening Pakistan's human resources pool in agricultural sector. The training program placed equal emphasis on public sector professionals, focusing particularly on the faculties of agriculture and on the private sector. The public and private sector officials who received academic and technical training in the field of agriculture are contributing for the development of Pakistan. With the training of faculty members, researchers, technicians and master trainers, the quantity and quality of training will continue to increase but the momentum would slow down.

C. Economic and Policy Analysis

This component has provided the necessary foundation for a modern information system in the form of the Economic Wing within the Ministry of Food and Agriculture. The Economic Wing thus has the potential to provide the GOP and the larger Pakistan food and fiber system with timely, relevant and reasonable accurate agricultural policy information and analysis. Both short- and long-term training of Economic Wing officers have given them the academic background, applied statistical, economic research and policy analysis skills that will permit them to perform at international standards of agricultural statisticians and economists. This

functional organization, with a staff of 39 professionals, is now financed through GOP own resources under an approved PC-1.

D. Storage Technology Development and Transfer (STDT)

Results of the policy research and development activities under STDT component were extensively used in policy dialogue under the Sector Grant component of ASSP. The STDT activities are surely sustainable because they have been institutionalized in the form of two cells created under ASSP -- Grain Management Cell (GMC) within the Punjab Food Department and Grain Research, Training and Storage Management (GRTSM) Cell at the University of Agriculture, Faisalabad (UAF). After completion of USAID funding in June 1994, the GMC is continuing its activities and planned several activities during 1994/95 which include: procurement of additional bulk handling equipment; training of 10 master trainers and 100 technicians; and continuation of research and development. Similarly, the GRTSM is continuing its operations with UAF's own resources after termination of USAID support in June, 1994.

E. Agriculture Data Collection (ADC)

This component, although made considerable progress, has a relatively poor potential for sustainability, mainly because of lack of high level GOP support and poor working relationship between the Federal Bureau of Statistics (FBS) and Provincial Departments of Agriculture (PDAs). The PC-1 for GOP's own funding after termination of USAID support is not yet approved. However, adhoc arrangements were made by GOP to continue the field activities. ADC is not expected to acquire other donors' support because it is based on U.S. technology developed by the U.S. Department of Agriculture. Therefore, the continuation of activities and protection of USAID's investment solely depend on GOP's own decision and resources.

F. Agribusiness Activities

Most of the Mission attempts at policy reforms in support of the private sector are here to stray. Privatization appeared to be emerging as a buzz word with successive governments that have been in power during the past five years. Because of this shift in emphasis, there is a trend to make use of policy analysis instruments and data bases. The institution created as a result of ASSP-supported studies, i.e., Agribusiness Cell (ABC) in the Ministry of Food and Agriculture will play an important role in the years to come. The senior officials in the GOP appear to be appreciative of the need to maintain this institution. Other donors and the private sector have shown interest in the activities of the ABC and different options are being considered to provide funding for its continuation.

