L. Ashton
PD-AAV-157
ISN=49011

AGENCY FOR INTERNATIONAL DEVELOPMENT

WASHINGTON, D.C. 20523

PROJECT PAPER
AMENDMENT #1

MOROCCO: Planning, Economics and Statistics for Agriculture (608-0182)

January 28, 1987

AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT DATA SHEET

1. TRANSACTION CODE: C (A = Add, C = Change, D = Delete) — Amendment Number: 1 — DOCUMENT CODE: 3

2. COUNTRY/ENTITY: MOROCCO

3. PROJECT NUMBER: 608-0182

4. BUREAU/OFFICE: ASIA/NEAR EAST — 03

5. PROJECT TITLE (maximum 40 characters): PLANNING, ECONOMICS AND STATISTICS FOR AGRICULTURE

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM 09 DD 30 YY 93

7. ESTIMATED DATE OF OBLIGATION (Under "B." below, enter 1, 2, 3, or 4): A. Initial FY 83 — B. Quarter 4 — C. Final FY 89

8. COSTS ($000 OR EQUIVALENT $1 =)

A. FUNDING SOURCE	FIRST FY 83 B. FX	C. L/C	D. Total	LIFE OF PROJECT E. FX	F. L/C	G. Total
AID Appropriated Total	800	59	859	11,747	820	12,567
(Grant)	(800)	(59)	(859)	(11,747)	(820)	(12,567)
(Loan)	( )	( )	( )	( )	( )	( )
Other U.S. 1.						
Other U.S. 2.						
Host Country				153	9,664	9,817
Other Donor(s)					500	500
TOTALS	800	59	859	11,900	10,984	22,884

9. SCHEDULE OF AID FUNDING ($000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE 1. Grant	2. Loan	D. OBLIGATIONS TO DATE 1. Grant	2. Loan	E. AMOUNT APPROVED THIS ACTION 1. Grant	2. Loan	F. LIFE OF PROJECT 1. Grant	2. Loan
(1) ARDN	184	052		6,736		0		12,567	
(2)									
(3)									
(4)									
TOTALS				6,736		0		12,567	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each): 05, 053

11. SECONDARY PURPOSE CODE: 189

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code	TECH						
B. Amount							

13. PROJECT PURPOSE (maximum 480 characters)

TO IMPROVE THE GOM'S ABILITY TO COLLECT DATA AND PUBLISH TIMELY AGRICULTURAL STATISTICS, UNDERTAKE ECONOMIC POLICY ANALYSIS, AND PLAN, MONITOR, AND EVALUATE AGRICULTURAL PROJECTS.

14. SCHEDULED EVALUATIONS: Interim MM 01 YY 87 — MM 04 YY 89 — Final MM 09 YY 92

15. SOURCE/ORIGIN OF GOODS AND SERVICES: ☐ 000 ☐ 941 ☐ Local ☐ Other (Specify) 935

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment)

(SEE SUMMARY OF REVISED PROJECT, PAGE 1 OF THE PP AMENDMENT)

17. APPROVED BY — Signature: Charles W. Johnson — CHARLES W. JOHNSON — Title: Mission Director — Date Signed: MM DD YY

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION: MM DD YY

AID 1330-4 (8-79)

PLANNING, ECONOMICS, AND STATISTICS FOR AGRICULTURE

(608-0182)

PROJECT PAPER SUPPLEMENT

USAID/MOROCCO

January 1987

TABLE OF CONTENTS

TABLE OF ACRONYMS

AIRD	Associates for International Resources and Development
ANE	Asia-Near East Bureau of USAID
AP	Aerial photography
ASF	Area Sampling Frame System
CNEA	Centre National d'Etudes Agro-economique
DEA	Division des Affaires Economiques (Division of Economic Affairs)
DP	Division du Plan (Planning Division)
DPA	Direction Provincial d'Agriculture (Provincial Agriculture Department)
DPAE	Direction de Planification et des Affaires Economiques (Department of Planning and Economic Affairs
ERS	Economic Research Service of the USDA
FAA	Foreign Assistance Act
FAO	Food and Agriculture Organization of the United Nations
FSI	Foreign Service Institute
FX	Foreign Exchange
GOM	Government of Morocco
IAV	Institut Agronomique et Vétérinaire Hassan II (Hassan II Agronomic and Veterinary Institute).
IBRD	The World Bank
IMF	International Monetary Fund
IQC	Indefinite Quantity Contract
LC	Local Costs
LOP	Life of Project
MARA	Ministère de l'Agriculture et de la Reforme Agraire (Ministry of Agriculture and Agrarian Reform)
PASA	Participating Agency Support Agreement
PP	Project Paper
PROAG	Project Agreement
SSD	Statistics and Documentation Service
SE	Economic Studies Service
S Ext	Service Exterieur
SI	Service des Incitations pour la Production Agricole (Service for Incentives to Agricultural Production)
SPE	Service du Projet et de l'Evaluation (Project and Evaluation Service)
SP	Service du Plan (Planning Service)
SRS	Statistical Research Service of the USDA
TA	Technical Assistance
TDY	Temporary Duty
USAID	United States Agency for International Development
USDA	United States Department of Agriculture

USAID PROJECT COMMITTEE

Rollo Ehrich/Malcolm Purvis	Agricultural Development Officers
Paul Crawford/John Dorman	Agricultural Economists
Sydney Lewis	Program Officer
Randal Thompson	Project Design Officer

USAID REVIEW COMMITTEE

Charles Johnson	Director
Rollo Ehrich/Malcolm Purvis	Agricultural Development Officers
Ken Schofield/Stacy Rhodes/John Giusti	Program Officers
Ernest Hardy	Controller
Robert Meighan	Regional Legal Advisor
James Anderson	Regional Contracts Officer
Janet Ballantyne	Deputy Director

ACTION MEMORANDUM FOR THE MISSION DIRECTOR

FROM: Ken Schofield, Program Officer

Problem:

Approval of the Project Paper Supplement for the Planning, Economics, and Statistics for Agriculture Project (608-0182).

Discussion:

The Planning, Economics, and Statistics for Agriculture Project (608-0182) is a ten-year, $12,567,000 project. The initial obligation was made in September 1983. The Project is being implemented with the GOM's Ministry of Agriculture and Agrarian Reform (MARA), principally through a PASA arrangement with USDA. Its goal is to make available current information and sound analysis that will enable GOM officials to make policy decisions that will lead to increased agricultural production. The purpose of the project, as stated in the original Project Paper, is to improve the GOM's ability to collect agricultural statistics, undertake economic analysis, and monitor and evaluate agricultural projects. The project is based in the Direction of Planning and Economic Affairs (DPAE) in MARA.

Current Project:

Project activities currently consist of long- and short-term technical assistance, long- and short-term training, and commodity support consisting primarily of aerial photographs and electronic data processing equipment. Three long-term PASA technical advisors are presently in country, a Senior Statistician (Chief-of-Party), a Statistician (Objective Yield Specialist) and a Senior Agricultural Economist. In addition, a total of approximately 220 person weeks of short-term technical assistance was programmed in the areas of statistics and area frame sampling, data processing, computer systems training, techniques for project monitoring, planning, evaluation and financial/economic analysis. Most of the commodities and materials to be provided to DPAE under the project have already been procured. These are principally computer equipment/software and aerial photography covering approximately 20 million hectares of Morocco.

Summary of Revised Project:

As described in detail in the attached Project Paper Supplement, project implementation experience to date, together with recently identified needs of MARA and several significant changes in the project environment, have led MARA, the USDA team, and USAID/Morocco to conduct a review of the original project design, particularly in the areas of economic policy analysis, agricultural investment planning, and training needs. The purpose of the project, as originally stated, is to be slightly modified to read: To improve the Ministry of Agriculture and Agrarian Reform's (MARA) ability to collect data and publish timely agricultural statistics, undertake economic policy analyses, and plan, monitor and evaluate agricultural projects (new language underlined). The new configuration of inputs and outputs which reflect this

revised purpose results from a determination that the economic policy analysis and investment planning elements of the project should be strengthened.

Under the modified project, an additional twenty-four person-months of long-term technical assistance, and 54 person-weeks of short-term technical assistance, will be provided to the DPAE through the PASA arrangement with USDA. Also through the PASA, modest additional data processing equipment and training in data processing management will be provided to the Division of Planning. Further, under a host country contract with a private U.S. consulting firm, approximately twenty-one person-months of technical assistance in the areas of agricultural price and incentive analysis will be provided to the DPAE's Division of Economic Affairs.

The project's training plan has been revised to shift emphasis from Ph.D.-level training to Master's-level and short-term training. The original plan, to provide 16 Ph.D. and 4 Master's degrees, has been changed to provide 6 Ph.D. and 23 Master's degrees. In addition, the Supplement provides for a substantial increase in tailor-made short-term course work in the U.S. for DPAE staff.

Under this Project Paper Supplement, one of the original project outputs has been revised to provide for an increased DPAE capacity to carry out economic policy-related studies. In addition, one output is added to the original list of project outputs. This is an increased DPAE capacity to do sound economic analysis in support of multi-year development plans. Two project outputs have been eliminated. First, the development of crop yield models is not now considered a priority for the DPAE given Moroccan conditions and the state-of-the-art of crop yield modeling. Second, the stated objective of increasing the DPAE's project design capacity is being eliminated because the design of projects is not within the mandate of the DPAE.

The above-mentioned changes do not involve additional LOP funding. A summary of the inputs and budgetary changes required is found on pp. 2 and 4 of the attached PP Supplement. Justifications for source/origin waiver to permit the procurement of a vehicle, at a cost of $12,500, for which the source is Morocco but the probable origin is France is included as Annex 7 to the PP Supplement. A sole source waiver has already been approved by the Mission Director (November 26, 1985) with respect to the contracting of the Agriculture Prices and Incentives Study. In addition, a waiver to permit the utilization of a government-owned organization as a subcontractor on that Study was signed by the Mission Director on November 11, 1986.

The Mission has informed the ANE Bureau of the proposed redesign of the project and of the preparation of a PP Supplement (Rabat 7628). No Congressional Notification is required, as no LOP funding increase is contemplated and the purpose/scope of the activity is not substantially different from that previously justified to Congress. No amendment of the Project Authorization is required, as the revised project remains fully consistent with the original Authorization.

You are authorized to amend this project (608-0182) under Section 2 of Redelegation of Authority No. 113.3A. The amended project description will be incorporated into the Project Agreement through an amendment to the Project Agreement in FY 1987.

Recommendation 1:

That you sign the amended Project Paper Supplement face sheet (Project Data Sheet), thereby amending the Planning, Economics, and Statistics for Agriculture Project.

Recommendation 2:

That, based upon the justification given in Annex 7 and the authority redelegated to you and by your signature below, you:

a. Waive the source and origin from Code 000 to Code 935 to permit the procurement of one project vehicle at an approximate cost of $12,500 from countries included in Code 935.

b. Certify that the exclusion of procurement from the Free World countries other than the cooperating country and countries included in Code 941, would seriously impede attainment of U.S. foreign policy objectives and objectives of the foreign assistance program; and

c. Certify that special circumstances exist to waive and do hereby waive section 636 (i) of the FAA of 1961, as amended.

Charles W. Johnson
Director, USAID/Morocco

Date January 28, 1987

Clearances:
AGR:PCrawford
DADO:RStryker
ADO:REhrich
CONT:EHardy
RCO:JAnderson
RLA:RMeighan
D/DIR:JBallantyne

PLANNING, ECONOMICS, AND STATISTICS FOR AGRICULTURE

(608-0182)

PROJECT PAPER SUPPLEMENT

I. SUMMARY STATEMENT OF MODIFICATIONS AND PRINCIPAL CHANGES

The Planning, Economics, and Statistics for Agriculture Project (608-0182) is a ten-year, $12,567,000 project, which was authorized in August 1983. The initial obligation was made in September 1983.

A. Purpose

The purpose of the project is to improve the Ministry of Agriculture and Agrarian Reform's (MARA) ability to collect data and publish timely agricultural statistics, undertake economic policy analyses, and plan, monitor, and evaluate agricultural projects. Project activities take place within MARA's Direction of Planning and Economic Affairs (DPAE).

B. Inputs

This Project Paper Supplement modifies the inputs and outputs of the project and slightly expands the project Purpose. No additional funds or time are required for the completion of the project. The Project Paper Supplement substantially expands the technical assistance activities of the economic analysis and planning components of the project. In addition, the original project's long- and short-term training plan is extensively modified in order to emphasize shorter, more practical training.

In order to capitalize on new opportunities for increased project activities in planning, economics and policy analysis work with DPAE, and in light of the experience gained in project implementation over the last two years, the Project Paper Supplement will: 1) add one resident TA person in economic analysis and data processing capacity to the DPAE's Planning Division; 2) incorporate the prices and incentives policy work explicitly into the project design (Phase I and Phase II); and 3) revise the training component. Table 1 presents a summary of the project's inputs under the Supplement.

TABLE 1: PROJECT INPUTS

	Units	Original Project	Project with Supplement
Resident USDA TA			
Senior Statistician - SSD	p/y	3	3
Statistician- SSD	p/y	3	3
Ag. Economist - SE	p/y	3	3
Economist/Ag. Economist - DP	p/y	0	2
Ag Prices and Incentives			
Resident Ag. Economist - AIRD	p/y	0	1.5
Agro Concept	p/y	0	4.7
Short-term Assistance - AIRD	p/w	0	125
Short-term TA [a]	p/w	220	274 [b]
Training			
Ph.D.'s	--	16	6
Masters in U.S.	--	4	23
Masters in Morocco	--	8	0
Short-term in U.S.	p/m	24	142.5
Commodities			
Upper Range Mini-computer (Software and Peripherals)	--	1 system	1 system
Aerial Photography	million has.	20	24
Aerial Photo Lab	--	1	1
Objective Yield Lab	--	1	1
Microcomputers	--	25	38
Vehicles	--	4	5

a/ Includes TDY assistance to conduct in-country training.

b/ Of which 44 person weeks are for the Division du Plan.

C. Original and Revised Financial Summary

The Project Paper Supplement incorporates the above changes in inputs with no increase in Life of Project funds ($12,567,000). See Annex 8 for the revised logical framework. Table 2 presents the original and revised financial summary. A detailed revised budget is found in Table 6. The changes in the budget are summarized below:

Technical Assistance: Funding for Phases I and II of the Prices and Incentives Study (approximately $763,000) and provisions for the Resident Economist for the Planning Service (approximately $260,000) is contained in this line item. In addition, short term technical assistance, including that needed to provide in-country training, has been increased.

Training: A substantial increase in cost is due primarily to the increased amount of short-term U.S. training.

Commodities: Total expenditures remain roughly the same. While there have been substantial savings due to the reduced cost of aerial photography, the cost of the planned data processing system was seriously underbudgetted in the original design. Also, the funds set aside for the purchase of satellite imagery were substantially above projected needs.

Contingency: Unused contingency funds from past years (FY 1983-86) have been reprogrammed to cover the increased costs in the other line items.

Inflation: Inflation has been recalculated to reflect actual experience and more realistic forecasts. The original budget provided for a rate of inflation of 7.5 percent compounded annually (roughly 10 percent of project costs over the life of the project). The rate of inflation is currently projected at around 4.5 percent compounded annually.

USAID considers that the revised budget is an accurate estimate of actual and expected projected costs under the Project Paper and its Supplement and that adequate reserve is still in the contingency line to allow for orderly project implementation in the out-years.

D. Outputs

The Project Paper Supplement adds one additional output to the twelve outputs in the original Project Paper and rewrites one other (refer to page 10-11 in the original Project Paper).

The revised output is #8: Policy Analysis: "A capacity will be developed in the Economic Studies Service (SE) and the Division of Planning to undertake high quality, policy-oriented analyses for senior GOK decision

TABLE 2: Original and Revised Financial Summary

	Original Project	Project with Supplement	Net Change (%)
Long-term TA	1,374,000	2,398,553	+ 74.6
USDA	1,374,000	1,638,295	
AIRD		760,258	
Short-term TA	835,000	1,088,717	+ 30.4
Long-term U.S. Training	1,747,000	1,945,230 [a]	+ 11.3
Short-term U.S. Training	128,000	501,331	+291.7
Commodities	5,158,000	5,243,209	+ 1.7
Computers	865,000	2,364,257 [b]	
Object Yield Lab	30,000	49,553	
Aerial Photo Lab	475,000	632,170	
Aerial Photography	3,000,000	1,798,695	
Digitizing Equipment		23,043	
Remote Sensing	100,000	100,000	
Satellite Imagery	510,000	-	
Vehicles	60,000	46,400	
Area Sampling Frame		6,618	
Office Equip	80,000	50,000	
Documentation Center	100,000	70,000	
In-country Purchases		21,780	
Evaluations	211,000	145,000	- 31.3
Other Costs	340,000	58,118	- 82.9
Contingencies	981,000	558,100 [c]	- 43.1
Inflation	1,793,000	628,742 [c]	- 61.9
TOTAL	12,567,000	12,567,000	

a/ Includes roughly $142,000 for English language training.

b/ Of this item, the minicomputer accounts for around $1,790,000 and the microcomputers for $575,000.

c/ Represents only contingency and inflation funds needed to support expenditure program for FY 1987 through to the PACD. Contingency and inflation funds for FY 1983 to FY 1986 have already been reprogrammed.

makers. The project will provide long- and short-term technical assistance, training and commodities for this purpose."

The new output #9 is: Planning: "In concert with the FAO project, USAID assistance will be provided to the Division of Plan for the development of an improved capacity to formulate long-term development plans and investment budgets."

Two Outputs are being eliminated from the project. One of these called for the development of crop yield models for major crops in order to permit the DPAE to incorporate agrometeorological and remote sensing data into crop forecasts, thus improving yield estimates and making them more timely and useful. Given the current state-of-the-art of crop yield modelling and the characteristics of Moroccan agriculture, it is no longer felt that the development of crop yield models is a priority use of project resources. While the original Project Paper argued that the historic yield and weather data available were adequate to develop unsophisticated yield models for major crops, this is no longer considered true. In particular, experience in recent years has demonstrated that, in countries such as Morocco where agricultural conditions and cropping patterns are very heterogeneous, the reliability of a given yield models is geographically very limited.

A second output in the original project design called for developing the capacity of the DPAE's Project and Evaluation Service (SPE) in the area of project design. However, since SPE does not currently have a mandate to carry out project design (this responsibility rests with the technical department of the Ministry), this output is being eliminated.

II. RATIONALE FOR PROJECT MODIFICATION

A. The Project as Designed

The project is based in the Direction of Planning and Economic Affairs (DPAE) in MARA. The organizational chart of the DPAE is shown in Figure 1. The DPAE is divided into two divisions, the Division of Economic Affairs and the Division of Planning. The Division of Economic Affairs is divided into three services, the Statistics and Documentation Service (SSD) and the Economic Studies, Markets and Prices Service (SE), and the newly created Service for Incentives to Agricultural Production (SI). The Division of Planning has two services, the Project and Evaluation Service (SPE) and the Planning Service (SP).

The DPAE is responsible for the collection and analysis of agricultural statistics, as well as for the preparation of economic studies and agricultural development plans. In addition to annual data collection on crop production, DPAE is charged with conducting over 20 other surveys on selected crops, markets and prices, agricultural employment and production techniques and costs. It is also mandated to institutionalize a system of monitoring and evaluation of agricultural projects.

Activities under the USAID Planning, Economics, and Statistics for Agriculture Project, to date, have taken place primarily within the Statistics and Documentation (SSD) and the Economic Studies (SE) Services of the Division of Economic Affairs, and only secondarily within the Project and Evaluation Service (SPE) in the Planning Division. Little assistance has been given to the Planning Service (SP), though it will receive substantial assistance under the proposed redesign. A discussion of these four services is presented below.

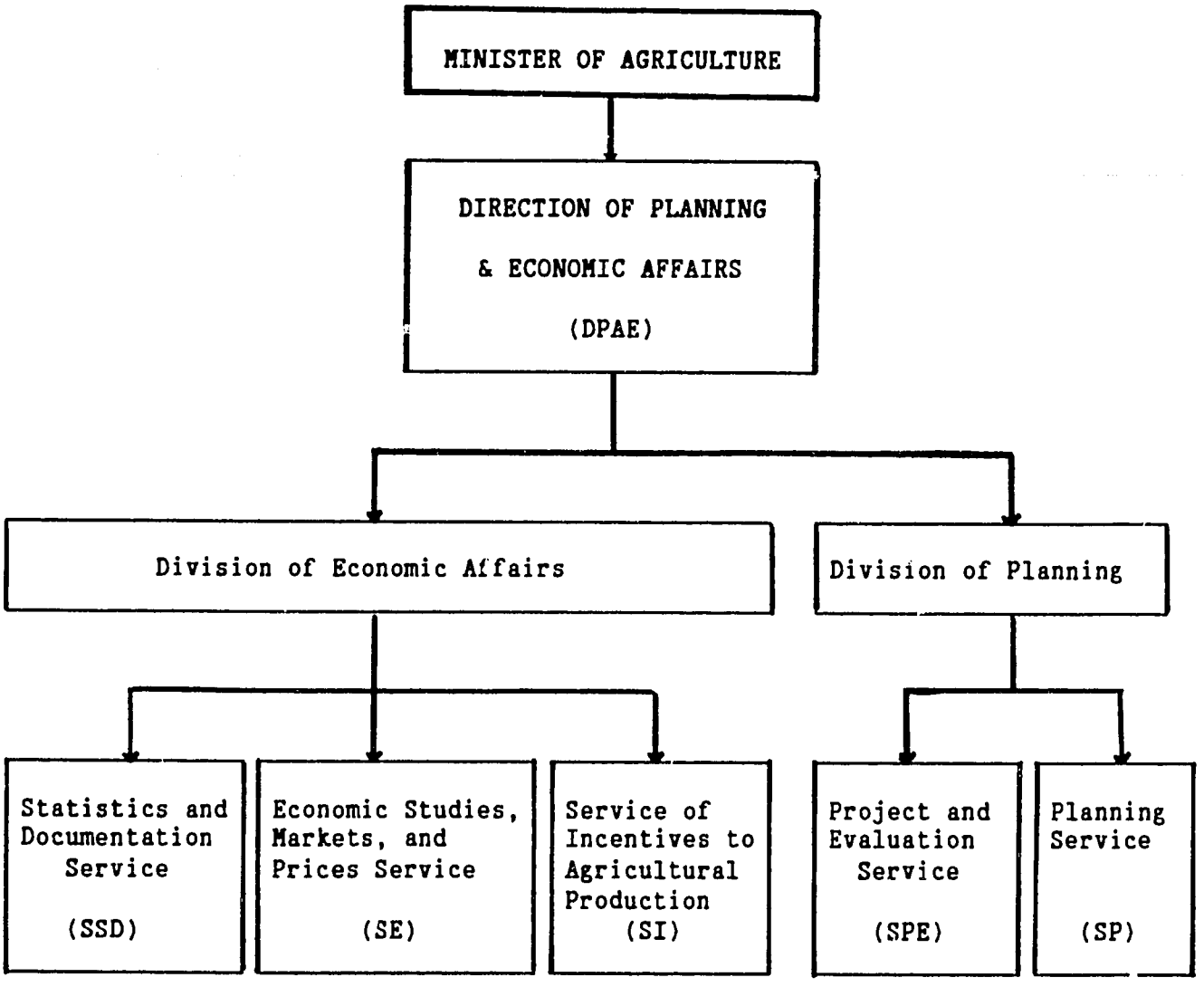
Assistance will also be given to the newly created Service for Incentives to Agricultural Production (SI). This assistance will consist of a part of the time of the resident Senior Agricultural Economist, one M.S.-level training participant, short-term training, and data processing and office equipment. SI is responsible for monitoring the size and effects of the various subsidy programs affecting Moroccan agriculture.

Finally, limited assistance will be given to the Service Exterieur of the DPAE, the regional offices in the Directions Provincials d'Agriculture (DPAs) which actually carry out the data collection. This will consist of three MS degrees, 12 person months of short term U.S. training and data entry equipment needed to aggregate and process survey data.

1. The Statistics and Documentation Service (SSD)

SSD is responsible for gathering and analyzing agricultural statistics. Its main data collection activities are the annual area surveys (undertaken shortly after planting) and yield surveys (made just before the harvest). In addition, SSD is charged with completing more detailed crop and livestock surveys, market and price surveys, and surveys of agricultural production techniques. It also maintains the archives of agricultural statistics. SSD has around 40 staff members in the headquarters, in addition to some staff at the field offices (the Service Exterieur), but relies on local extension agents as enumerators.

Figure 1: ORGANIZATIONAL CHART OF THE DPAE



The project has been supporting the development of SSD through 1) establishing an area sampling frame, based on aerial photography, to enable SSD to collect agricultural data more efficiently; 2) strengthening SSD's ability to process the raw data that is collected (through the upgrading of its data processing capability) and the development of a computerized agricultural data bank; and 3) developing objective yield methodology that would enable SSD to incorporate agrometeorological and remote sensing data into their crop forecasts.

2. The Economic Studies Service (SE)

SE has the responsibility to conduct economic studies related to the agricultural sector. SE currently has only seven trained professionals (six permanent staff) of which only five have studied beyond the BS level. The unit is responsible for undertaking economic and trade studies, including studies on the effects of various subsidies on production and consumption; designing and recommending sound economic policy interventions; and addressing issues related to the internal and external marketing of agricultural products, particularly cereals.

As a relatively new service, the exact scope of the SE's studies and analyses has not yet been fully defined. Although the mandate from MARA to SE is very broad, as delineated in the past Five-Year Plan, very little direction has been given to its work. For example, the last Five Year Plan (1981-85) lists 13 agro-economic studies to be undertaken in such areas as agricultural production, agricultural inputs, value added in agriculture, agricultural prices, credit, and international trade in agriculture. Exactly what these studies should address is not described in the Plan. SE must therefore begin by specifying the objectives of the studies to be undertaken. After having done this, it must determine the form of the studies, specify the methods to be used and the data that is needed.

Project assistance to SE is currently focused on the improvement of that service's capacity to conduct economic analyses relevant to the agricultural sector. Capacity to analyze specific agricultural policy problems will be developed as well as the capacity to produce regular (monthly and annual) situation and outlook reports.

3. The Project and Evaluation Service (SPE)

SPE is mandated to institutionalize a system of monitoring and evaluation of projects. It was established in 1982, with funds from the World Bank. Over time it will be expected to monitor all significant international and domestically funded projects in the agriculture sector, as well as to perform substantive evaluations. SPE also participates in the identification of projects and their preparation, but this is largely the responsibility of the "chefs des projets" of the technical departments in the Ministry.

SPE is supposed to monitor project performance, including financial and economic, social, and policy aspects, as well as to assess the impact of substantive interventions. At present, the staff in SPE are too few and insufficiently trained to carry out all of these tasks. They have, however, developed an approach to the implementation of their mandate, and are engaged in carrying out as many of their tasks as currently possible given current manpower and financial support.

To date, project assistance to SPE has been focused on the development of timely status reports on the implementation status of development projects in the agricultural sector, the use of impact evaluation systems, and improving the DPAE's capability to carry out project design.

4. The Division of Planning and the Planning Service (SP)

SP has the responsibility for identifying and planning development projects. The service plays a coordinating role with the other services in the DPAE, particularly the Project and Evaluation Service (SPE) and the Economic Studies Service (SE). The Planning Service has 15 full time staff at its national office in Rabat. Of this staff, 11 have the equivalent of a U.S. bachelor's degree and 4 have the equivalent of a Master's degree in various fields of Agriculture.

Minimal assistance has been provided to SP during the initial years of the Project. However, under the proposed revisions, SP will receive approximately 24 person-months of long-term technical assistance, as well as short-term technical assistance and training. The project will also provide commodities support to SP, in particular micro-computers to upgrade its data processing capability, and report production equipment (e.g. a printing press, and a photocopier).

B. Initial Implementation Performance

The project was slow in its initial implementation, due in large part to delays in signing the PASA. Project activities essentially began with the arrival of the PASA Team Leader (the Senior Statistician) in February 1985 and the two other USDA resident advisors, a Senior Agricultural Economist and an Objective Yield Statistician, in August and October 1985, respectively. The project has now picked up momentum. Major advances have been made during 1985 and 1986 in commodity procurement, the installation of ADP equipment, and aerial photography procurement. The first large-scale in-country training program was conducted in January 1986.

C. Changes in Project Environment, 1983-1986

Since the Project was designed in 1983, a number of important changes have occurred in the environment surrounding the project. The most important of these is a greatly enhanced appreciation by GOM of the importance of agricultural economics and economic policy analysis. This is described in more detail below. In addition, on the basis of fifteen months of project implementation, it has become apparent that the original project training plan does not meet the needs and capacities of the DPAE. This issue is also examined below.

1. The Economic and Institutional Context

As described in USAID Morocco's 1987-1991 CDSS, the Moroccan economy is in a crisis. This has had a severe impact on the GOM budget and development investments by GOM Agencies, including MARA, and has resulted in hiring freezes, the suspension of all new project starts, and delays in the development of a new multi-year plan. On the other hand, however, the economic crisis has led to a significant increase in the willingness of the GOM to enter into a policy dialogue on structural reform with the IMF, IBRD,

AID and other donors. In the agriculture sector, this has been reflected in an increased understanding of the importance of policy analysis. Major donor conditionality has been encouraging a swing away from state regulation of prices and marketing margins towards greater reliance on the open market to set prices. This changed setting has also provided support for an increased role of the DPAE in the Ministry. The early efforts of the USAID/PASA team have also created a new awareness on the part of the leadership of MARA and of the DPAE, as to the need for increased economic and analytical skills. There has been a certain demystification of economic analysis and an increased appreciation of the potential for improvement in the Ministry's capabilities. Against this general background, it is important to spell out several specific developments in 1984 and 1985 which have had an impact on the project. These are: the Prices and Incentives Study, assistance to the Planning Division financed by the Food and Agriculture Organization, the creation of Agro Concept, and the staffing of the DPAE.

2. The Prices and Incentives Study.

In 1983, as part of its sector reform process under IBRD sponsorship, and as a self-help measure under a Title I agreement, MARA requested USAID assistance in undertaking a major study of the policy environment in the agricultural sector, focusing specifically on the role of price and incentive policies. USAID/Rabat decided that this study was fully consistent with the purpose of Project 608-0182 and, therefore, project funds were used to finance technical assistance from a U.S. consulting firm to assist MARA in implementing it.

Field work began in May 1984 and a final report was delivered in January 1986. This study, which examined the level of "effective protection" of the agriculture sector, was conducted under a Host Country Contract and in conjunction with a high level Study Group in the Ministry of Agriculture. Staff members of the DPAE participated in the study and took part in various reviews of its progress and results.

The Prices and Incentives Study has proven to be extremely useful in furthering the process of policy reform in the Ministry of Agriculture. The World Bank and the GOM have used the initial results of the study as the basis for formulating the policy reforms included in the Bank's agricultural sector loans. USAID's initial involvement in financing the study has enabled it to sit at the multidonor policy-dialogue table as an equal and active partner. The study has also provided the basis for the development of new Self-help Measures in the PL 480 Title I negotiating process.

The Prices and Incentives Study is considered by MARA and the Mission to be a very substantial achievement. It has not only laid the basis for two major IBRD agricultural sector loans totaling $250-300 million, but it has also created a new confidence on the part of MARA in its own capabilities. It was the first analytical study of this kind ever conducted by and for MARA, and it has created a surge of new interest in economic analysis. It has also established an orderly, systematic data base out of a morass of previously unusable information.

However, the study (and the resources needed to carry it out) were not explicitly provided for in the original Project Paper. Moreover, in order to maintain the momentum created by the initial Prices and Incentives Study, MARA

made a request in December 1985 that USAID finance additional assistance from the same consulting company, in order to establish a permanent capacity within the Ministry to carry out such analyses. USAID has approved a limited waiver to allow MARA to negotiate a new host country contract for this purpose. It is anticipated that the Phase II activities of the Prices and Incentives Study will begin in January 1987. This project modification recognizes the activities of the MARA Prices and Incentives Study as an important part of the redesigned project and makes appropriate budgetary allocations to finance the needed technical assistance.

3. FAO Assistance

At the time of the design of the original project (1982/83), FAO was proposing to provide substantial assistance to MARA, specifically to the Division of Planning of the DPAE, in the area of economic planning. Assistance worth several million dollars was envisioned, with emphasis on the provision of technical assistance to the Division. After substantial delays, FAO assistance was finally initiated in early 1986, albeit at a reduced level (estimated at about $500,000 for two years). One long-term advisor will serve as the FAO project coordinator and will organize short-term technical assistance in the area of planning for the DPAE. MARA considers the FAO assistance to be insufficient to meet the planning division's increased needs, especially for technical assistance, data processing equipment and training. MARA has now, therefore, turned to USAID for supplementary assistance in this area, in large part because of the relative success of U.S assistance to the other division of the DPAE. However, the original project provided for only limited commodity assistance and short course training to the Division of Planning, and then for only one of its two Services - the Project and Evaluation Service (SPE). This project modification, recognizing this as an important opportunity to strengthen a key element of the Ministry's planning operation, proposes an expanded program of assistance to the DPAE's Division of Planning.

4. Agro Concept

During 1985 a mixed public/private corporation (66 percent publicly owned), known as Agro Concept, was created with the direct encouragement of the Ministry of Agriculture. Agro Concept is a consulting company whose core staff is made up of young Moroccan economists and systems analysts. Agro Concept grew out of an earlier consulting company known as Data Concepts. The underlying impetus behind Agro Concept was a recognition by the senior leadership of the Ministry of Agriculture during 1984 and 1985 that the Ministry did not have adequate economic analysis capacity. The Ministry had been encouraged by USAID to look at alternative organizational structures, as a means of augmenting Ministry staff capacities and for conducting analyses outside of the day-to-day preoccupations of the DPAE. In the United States and elsewhere much of this kind of analytical work is done by "think tanks", universities and consulting companies. USAID encouraged the Ministry to also look at organizational structures in other LDCs including the 15 year Tunisian experience with the Centre National d'Etudes Agro-economique (CNEA). The Ministry decided to help create Agro Concept and expects that it will, over a period of 2 to 3 years, emerge as a fully independent, internationally competitive consulting company which would work for both the public and private sectors in Morocco. The Ministry plans to contract special studies to Agro Concept and even to temporarily detach Ministry staff to Agro Concept to

work on specific projects. Agro Concept will formally report to the DPAE. The consequence of Agro Concept's creation will be to augment the resources available to the DPAE and to provide high quality technical consulting services on specific problems.

In early 1986, USAID gave careful consideration to whether it should formally incorporate assistance to Agro Concept into the modified project design and make the institutional development of Agro Concept a sub-purpose of the project. The Mission's view is that the establishment of Agro Concept is a positive development. However, it was decided that direct aid to it would run the risk of diluting the fundamental objective of the project, which is to establish an analytical capability for planning, economic analysis and statistics within the Ministry of Agriculture itself. The creation of this institutional capability in MARA is the fundamental rationale for using a PASA with USDA for implementing the project.

USAID, therefore, has not incorporated into this project modification direct assistance to establish and support Agro Concept. However, a government-owned organization waiver has been approved by USAID that would permit Agro Concept to serve as a subcontractor in the Agricultural Prices and Incentives Study.

5. Problems in Staffing and Training

Staffing. The staff of the DPAE is predominantly within the Statistics Service (SSD). The staff of the other services of the DPAE, those concerned with economic analysis and planning, are more limited, in terms of manpower and skill levels. At the time of the original project design, it was assumed that the Ministry of Agriculture would recruit additional individuals to the DPAE for the economics services. This would have increased both the staff size and the pool of people available for training. Shortly after the original project design was finalized, the impact of Morocco's economic crisis began to be felt and the GOM undertook a severe austerity program, most notably hiring freezes. Nevertheless, the reinforcement of the DPAE in staff economists was the subject of both AID and IBRD policy dialogue and conditionality in 1984 and 1985.

Due to AID's efforts (through PL 480 Title I conditionality) and its insistence on the need for more DPAE staff, MARA decided in April 1986 to allocate additional cadres to the economics services of DPAE. In all, 15 additional staff members will be added (3 in 1986, and 12 more over the subsequent 3 years). It is now possible to lay out a staffing pattern (and associated hiring needs) which will permit the DPAE to develop both the quantity and quality of staff that are needed for its long run institutional development.

Training. It also became obvious during the first year of project implementation that the type of training projected by the original Project Paper was, in large part, inappropriate. Too many Ph.D programs and too few short-term non-degree programs were planned. The experience of the PASA team has also indicated that much of the daily work of the DPAE could be done by staff with only M.S. training or short-term specialized training. It is the shared view of USDA, USAID, and the Ministry of Agriculture that fewer people are needed with advanced research degrees (Ph.D.'s). The project, in its first year of implementation, has had considerable success in equipping DPAE

with microcomputers and in organizing short course training in micro computer applications for economic analysis. Moreover, the intent expressed in the Project Paper to have a significant number of M.S. degree programs in project analysis conducted at Morocco's Institut Agronomique et Vétérinaire Hassan II (IAV) is not operational. Unfortunately, IAV has not yet developed a capacity to teach graduate programs in agricultural economics.

In light of these considerations, the training plan has been completely revised by this project modification. It provides for a less academic, but more practical, approach to the training needs of the DPAE and will ensure that the DPAE has the human resources it needs for its sustained development by the end of the project.

III. REVISED PROJECT DESCRIPTION

The following replaces the parallel sections contained in the original Project Paper:

A. Project Goal. The Project goal is "to make available current information and sound analysis that will enable GOM officials to make policy decisions that will lead to increased agricultural production". Timely and reliable statistics and information based on analysis of data are of benefit to both public and private decision makers. For example, private farmers and businessmen benefit from timely information on current prices, crop forecasts and analysis of market trends in making production and investment decisions. Likewise, public policy makers need data and analysis to assess the consequences of public policies and to make informed choices on the utilization of public investment funds.

One of the serious constraints to realizing this goal is the lack of a comprehensive program to provide the accurate and timely data required for improved policy decisions and sound agricultural planning. Due to the seasonal nature of agriculture, timely and accurate information is especially critical to successful development of the sector. Required information includes not only basic data on agricultural production but also the analysis of these data for policy decision makers, planning and project design and evaluation.

Because of these needs, the GOM created the Directorate of Planning and Economic Affairs (DPAE) in 1980, as part of the 1978-80 Triennial Plan. The responsibilities of DPAE include the gathering and analysis of agricultural statistics, as well as the preparation of economic policy studies and agricultural development plans and the preparation and evaluation of investment projects.

USAID's global objective in the Agricultural Sector, as contained in the FY 87-91 CDSS, is to increase the productivity and aggregate output of food crops and livestock in Morocco. This overall objective has three linked sub-objectives:

(1) To strengthen agricultural education and technical and socio-economic research.

(2) To increase the availability to Moroccan farmers of agricultural inputs and production increasing technologies.

(3) To stimulate an agricultural policy environment conducive to the growth and development of the sector.

While this project will contribute to all three of these sub-objectives, it is the principal project activity in AID's program for achieving the third of these. For this reason, it is clearly related to, and coordinated with, the annual process of negotiating GOM Self-help Measures under the PL 480 Title I agreement.

B. Project Purpose

The Purpose of the Planning, Economics and Statistics for Agriculture Project is to improve the Government's ability to collect data and publish timely agricultural statistics, undertake economic policy analyses, and plan, monitor and evaluate agricultural projects. (Note: The words underlined have been added to the Purpose definition in the original PP project paper.) The achievement of this purpose will be accomplished when the DPAE has the capacity to effectively carry out these activities without external assistance. This objective should be reached by the end of the project in 1993.

The project should begin to produce measurable results in improved data collection and economic analysis by 1987. An impact in all areas being supported under the project will begin to be felt in 1988, when long- and short-term trainees begin to return from the U.S. The phasing of the project is designed so that data processing facilities will be in place to get maximum benefits from personnel returning from high-level and tailor-made training. Thus the major share of computer equipment, both hardware and software, will be operational in 1987. All professional training should be completed by FY 92 and a complete integration of operations attained within the DPAE by 1993.

C. Outputs

The major outputs of the DPAE project are:

Statistics

(1) An Area Sampling Frame system (ASF) for agricultural surveys. The ASF is a system which incorporates probability sampling into data gathering. The use of probability sampling permits accurate data to be gathered in a low cost and efficient manner.

(2) A functioning program of current, regularly scheduled agricultural statistics based on the use of the ASF. The primary use of the ASF will be for the regularly scheduled national crop and livestock surveys. The annual survey, which provides the basic crop area estimates, will serve as a base for future sub-samples which can be used for objective yield surveys, agricultural inputs or farm management and labor surveys. Also the annual survey will serve as a "ground truth" base which is necessary for computer classification of satellite remote sensing.

(3) An expanded data processing capability in DPAE. The DPAE will be equipped with computer capacity that will allow them to process the data for all national agricultural surveys, handle the requirements for major economic studies and maintain project monitoring and management information.

(4) A set of aerial photographs and a functioning photography laboratory. Aerial photography is needed if the ASF technology is to be expanded throughout the country. The development of laboratory facilities to handle the photographs, once taken, is a major element in the ASF technology.

(5) Strengthened Objective Yield Analysis Capacity. Objective yield surveys provide crop yield information for estimates at harvest. They can also be used for forecasts (prior to crop maturity). The system to be developed under this project will vastly increase the reliability of yield estimates for major crops. It will also permit earlier estimates and forecasts of production.

(6) The procurement and use of satellite data for improving crop area and land-use estimates and for ASF maintenance. The project will utilize satellite technology to reduce costs in keeping crop and land use data current.

Economics

(7) Increased Policy Analysis Capacity. A capacity will be developed in the Economic Studies Service (SE) and the Division of Planning to undertake high quality, policy-oriented analyses for senior GOM decision makers. The project will provide long- and short-term technical assistance, training and commodities for this purpose. By FY 88 the DPAE should be rapidly expanding its capacity to respond to requests for economic analysis. The DPAE will be able to conduct analyses based on standard concepts such as effective protection, supply analysis, marketing and input analysis, farm budgeting, linear programming and agricultural sector modeling.

(8) A Strengthened Planning Capability. In concert with the FAO's project assistance, USAID will provide a long-term advisor for three years to the Division of Planning to increase its capacity to do sound economic analysis in support of multi-year development plans. The annual investment budget will be computerized and budget control techniques improved to tighten the management of the investment budgeting cycle.

(9) Project Monitoring and Evaluation Capacity. The Project and Evaluation Service will develop a capacity to monitor project implementation (e.g. costs and disbursement, physical accomplishments) and to evaluate their impacts and ex-post benefits.

General

(10) An Agricultural Data Bank. A capacity will be developed to computerize the physical and economic data series utilized by the DPAE. This system, integrated into the other MARA systems, will allow ready access to current agricultural data.

(11) Documentation Center. For research and reference purposes, an improved center to house and maintain current documents in project evaluation, economic analysis, and statistical methodologies will be developed in the DPAE.

As noted above, two Outputs in the original project design are being deleted. As presented in the original Project Agreement, these were:

- Crop yield models for major crops. The development of crop yield models will permit the DPAE to incorporate agrometeorological and remote sensing data into crop forecasts thus improving yield estimates and making them more timely and useful.

- Project Design Capacity. The project will develop the capacity of the DPAE's Project and Evaluation Service to conduct economic and financial project design analysis. It will result in the establishment of standard design procedures (e.g.benefit/cost ratios, sensitivity analysis) for pre-project economic and financial analysis by the end of 1988.

D. Inputs

Of the total costs of the project (estimated to be $21,588,000), the U.S. contribution will be $12,567,000 and the GOM contribution will be $9,817,000. (Note that this projected GOM contribution exceeds the amount originally anticipated. The total GOM contribution, for purposes of the Project Agreement, will remain "not less than the equivalent of US $9,021,000", as established in the original Project Agreement). The inputs financed by USAID are summarized below.

1. Technical Assistance

(a) Resident Technical Assistance

Under a PASA agreement with the USDA, the project will finance 11 person years of long-term technical assistance. In February 1985, a statistician arrived in Morocco to provide 3 man-years of assistance to the Statistics and Documentation Service (SSD). An Agricultural Economist arrived in August 1985 to serve 3 years with the Economic Studies Service (SE), and in October 1985 a second statistician began work in Morocco with SSD (again for a 3 year period). In 1987 a second Agricultural Economist will be assigned to the Planning Division (DP) for a two year period. The duties of this advisor will include:

1) Strengthening the capacity of DPAE in the area of analysis of agricultural supply response. This includes providing leadership to the Planning Division in traditional quantitative approaches to supply response analysis, as well as providing a more micro (or farming systems) oriented approach to identifying constraints to increased agricultural production;

2) Assisting in the creation of a system to formulate a national strategy for agricultural development;

3) Developing appropriate methods for the Planning Division to analyze agricultural policy alternatives and policy measures necessary to achieve agricultural production objectives;

4) Training the staff of the Planning Division in modern methods for economic policy analysis, microcomputer hardware and software use, and quantitative methods; and

5) Assist with the coordination of the agricultural plan and the preparation and monitoring of agricultural projects.

In 1984, under a Host Country Contract, USAID financed 18 person-months of long- and short-term technical assistance to do a policy study on the prices and incentives within the agriculture sector. A Phase II (follow-on) will begin in January 1986 and will continue the work initiated in 1984 and provide an institutional base within the DPAE to continue analyses of this kind. A Committee, composed of the Head of the Economic Studies Service (or his designee), the USDA Resident Agricultural Economist, representatives of the Prime Contractor and Subcontractor for the Study, and the USAID Project Officer, will be responsible for ensuring that the efforts of the Agriculture Prices and Incentives Study are coordinated with those of the overall project.

(b) Short-term Technical Assistance

The project will finance nearly $1,088,000 of short-term technical assistance, of which approximately half will be for the purpose of in-country training of DPAE staff (a detailed schedule of TA requirements is contained in Annex 3). This advisory and training assistance is programmed throughout the LOP and scheduled to coincide with the phased development of the various technical aspects of the project. Short-term technicians will also aid the statistical service as its staff progresses from the development of the Area Sampling Frame to sophisticated remote sensing and yield modeling efforts.

An estimated 128 person-weeks of short-term technical assistance will be provided to SSD (some of which will benefit the DPAE as a whole), of which 46 person weeks of assistance will go towards providing in-country training.

Another 65 person-weeks of short-term technical assistance are programmed for the Economic Studies Service (SE), of which 32 person weeks will be dedicated to providing in-country training. These technicians will work with the SE staff to develop models to undertake specific analysis of such things as agricultural import policy and producer and consumer price subsidies.

Approximately 37 person-weeks of short-term technical assistance are programmed for SPE. Of this, 18 person weeks will be to provide in-country training.

Finally, some 44 person-weeks of short-term technical assistance, including 20 person weeks of TA for in-country training, are programmed to assist SP in the improvement of its project planning, budget analyses and management responsibilities.

2. Training

The original project envisioned the training of 16 persons in the United States to the Ph.D. level and 4 to the MS. level. This training was to be in the areas of statistics and agricultural economics, as they related to crop and livestock production; forecasting, monitoring and analysis; and in fields related to project monitoring and management. Eight candidates were also to be sent to earn their M.S. Degrees from Morocco's Agronomic Institute, IAV Hassan II. However, due to the fact that IAV has not yet developed sufficient capacity to teach graduate programs in agricultural economics, this aspect of

The training program has not been operational. Short-term training in the U.S. was planned to permit Moroccan staff to work with U.S. scientists in areas such as crop forecasting and remote sensing, or to attend scheduled short courses given by the USDA and the World Bank. On-the-job training and in-country seminars and workshops were also planned for Moroccan staff.

A summary of the revised training needs of the DPAE is presented in Table 3. A revised training plan is provided in Annexes 3 and 4. The candidates for this training will be selected by the Ministry of Agriculture in consultation with USAID. They may be either present personnel in the DPAE or within the Ministry who would be assigned to the DPAE upon completion of studies.

(a) Long-Term Training

The Statistics and Documentation Service (SSD). While the training level is already relatively high within SSD, there are certain specific needs that must be met if the demands for good agricultural data and analyses are to be satisfied. Since SSD's functions are not research oriented, there is greater need for a practical, than for a theoretical, knowledge base. The training plan for SSD has been adjusted to include two Ph.D. programs, nine Master's programs and a wide range of specialized training designed to sharpen certain specific skills needed by the Service. The two Ph.D. programs will be in statistics and in agricultural economics with emphasis on econometrics. The nine MS training programs will be in statistics (3 individuals), agricultural economics (3 individuals), data processing (2 individuals) and library science/documentation (1 individual).

Economic Studies Services (SE) Some of the professional staff within SE have been trained to the Bachelor's or Master's degree level. However, while some of these individuals have received limited training in economics and statistics, these disciplines have not been the focus of their academic training. In order to undertake the in-depth economic analyses needed by the Ministry of Agriculture, professionals within this division need additional long-term training in specific technical areas.

The project will provide long-term training for two SE professionals at the Ph.D. level and five at the Master's level. The following outline of programs will meet the training needs of SE in the most efficient and cost-effective manner:

- One Ph.D. program in agricultural economics with specialization in international trade and agricultural development.
- One Ph.D. program in agricultural economics with a concentration in production economics and mathematical programming.
- One M.S. program in agricultural economics with specialization econometrics.
- One M.S. program in agricultural economics with specialization in cost-benefit analysis.
- One M.S. program in agricultural economics with concentration in agricultural finance.

TABLE 3: DPAE Training Summary

	Long-term Training	Short-term U.S. Training (p/m)	Level of TA Needed to Conduct In-country Training (p/w)
SSD	2 Ph.D., 9 M.S.	32.5	46
SE [1]	2 Ph.D., 6 M.S.	33.0	32
SPE	2 Ph.D., 2 M.S.	54.0	18
SP	3 M.S.	11.0	20
S Ext	3 M.S.	12.0	-
	6 Ph.D. 23 M.S.	142.5	116

1/ Includes one M.S. in 1988 for SI, the Service for Incentives to Agricultural Production.

- One M.S. program in agricultural economics with concentration in agricultural production economics.

- One M.S. program aimed at general agricultural economics (with a specialty yet to be determined).

Service for Incentives to Agricultural Production (SI) One staff member of SI will be sent for an M.S. degree in general agricultural economics.

The Project and Evaluation Service (SPE) The Project and Evaluation Service is responsible for designing, monitoring and evaluating agricultural investment projects throughout Morocco. Given the broad scope of SPE's activities, the training needs of this division are diverse. First and foremost, there is a need for additional training in project analysis. SPE also needs individuals with in-depth training in agricultural economics and agricultural statistics. Training in statistical survey techniques is also needed, given the importance of survey methods in the process of monitoring and appraising projects. Furthermore, since many projects include an agricultural credit component, SPE also needs staff with training in agricultural finance.

The modified training plan for SPE consists of Ph.D.-level training for two individuals, and M.S.-level training for two individuals. A special, one-year non-degree program in project analysis will be provided for approximately four SPE staff. Degree training is not necessary for the majority of SPE's practitioners in project analysis. Focused training in specific technical and economic areas is a much more effective and efficient method of strengthening SPE's capacity. The long term training received by SPE will include:

- One Ph.D. program in agricultural economics with concentrations in agricultural finance and cost/benefit analysis.

- One Ph.D. program in agricultural economics with specializations in econometrics and linear programming.

- One M.S. program in agricultural economics, specialization in production economics and econometrics.

- One M.S. degree in general agricultural economics.

Planning Service (SP) The long-term training program for the Planning Service will involve 3 M.S. degrees in agricultural economics. One of these will specialize in Agricultural Production and International Trade and the other two will involve specialization in quantitative methods.

Service Exterieur (S Ext) Three individuals from the Service Exterieur will receive M.S. degrees in agricultural economics (specialities to be determined). This will further the DPAE's goal of ultimately conducting quality studies at the regional level.

(b) Short-Term Training

Annex 4 summarizes the short-term training to be provided under the project which are to be carried out in the U.S.

The Statistics and Documentation Service (SSD): SSD will require, over the life of the project, 32.5 person months of short-term training in the U.S. This will include training in photo interpretation, photo lab management, sampling, remote sensing, yield measurement skills, various analytic techniques and a variety of other fields. Some courses have already been scheduled, while other subjects will be covered by individualized training in Morocco or in the U.S.

Economic Studies Services (SE) Short-term training in the U.S. for SE staff will consist of nine-month long programs for approximately three individuals from SE. While this component should remain flexible to meet SE's specific needs, possible areas for specialized training include advanced agricultural sector modeling, agricultural finance, agricultural credit programs, and special topics in international trade. In addition, some 6 months of training is programmed in microcomputer maintenance.

The Project and Evaluation Service (SPE): Four one-year specialized training programs in the U.S. will be provided to SPE staff in project evaluation. Other areas of concentration will include agricultural finance, farm budgeting, and public finance. Participants will also take courses in micro-economics, statistics and linear programming. In addition, six months of training is programmed for project analysis and implementation.

Planning Service (SP): The short-term training programmed for SP staff includes 9 person months in agricultural sector planning, and 2 person months in management.

Service Exterieur (S Ext): Two individuals will receive 6 months of training each in statistics and data collection.

(c) In-Country Training

The short-term training program for the DPAE consists of training based in Morocco, as well as that in the United States. Some in-country training courses will be relevant and applicable to the work of all the bureaus within DPAE, whereas other courses will be more specifically tailored to the work and activities of a particular bureau. While some of the in-country training will be provided by the resident staff, training presented by short-term consultants has been separately programmed and budgetted. The general level of effort for in-country training by short term consultants is detailed in Annex 2.

An estimated 46 person weeks of assistance will be given to SSD to support in-country training efforts in such fields as sampling techniques, data processing, computer maintenance, objective yield surveys, remote sensing, development of a data bank and yield modeling efforts.

Around 32 person weeks of technical assistance will be given to SE for in-country training activities in statistical and quantitative methods, marketing and international trade, cost of production analysis, sector modeling, and agricultural policy analysis.

Approximately 18 person weeks of TA for in-country training, is programmed for SPE. This in-country training will cover project evaluation

techniques, project management, computer systems, financial and economic analysis and personnel management.

Approximately 20 person weeks of TA is programmed to provide in-country training to SP. This training will be in fields such as project planning, budget analyses and management responsibilities.

3. Commodities

It is anticipated that the U.S. will provide over $5.2 million in foreign exchange costs of commodities for this project. The commodity purchases made and planned under the project are summarized in Table 4. It will be noted that, while total expenditures remain roughly the same, there have been shifts within this line item. In particular, there there have been substantial savings due to the overestimation in the original design of the cost of the aerial photography component. At the same time, however, the cost of the planned data processing system was seriously underbudgetted. In addition, the funds set aside for the purchase of satellite imagery were substantially above projected needs.

Table 4: Commodity Purchases

	Expenditures thru FY 1986	Future Expenditures	Total Expenditures
Minicomputer	1,174	616	1,790
Microcomputer	300	274	574
Object Yield Lab	27	33	60
Aerial Photo Lab	592	40	632
Aerial Photography	836	963	1,799
Digitizing Equipment	10	13	23
Remote Sensing	-	100	100
Vehicles	36	10	46
Area Sampling Frame	5	1	6
Office Equip	14	36	50
Documentation Center	-	70	70
In-country Purchases	8	34	42
Other	45	6	51
Total Commodities	3047	2196	5,243

4. Deferred Activities and Decisions

As a result of the discussions that occurred during the process of this modification, more activities were identified as important than could be funded within the current budget. To the extent that, in the future, funds become available from either the contingency or inflation line items, these funds will be allocated to these, or other jointly agreed upon activities. The deferred needs already identified include the following:

- Additional resident technical assistance as of FY 1989. The current schedule of resident TA implies that, while the Project will continue until the end of FY 93, the final resident advisor would depart in FY 89. However, during the out-years, the scale of the project will remain substantial and require significant in-country coordination by the contractor. In addition, nearly half of the M.S. and Ph.D. participants will return after FY 89. The presence of resident advisors to provide both guidance to the DPAE and on-the job training to these returnees during the period of their reintegration into the DPAE could help maximize the benefits of their overseas training. Finally, fundamental policy changes are now underway in the agricultural sector. The DPAE does play, and will continue to play, an important role in defining these policy reforms and in assessing their impact. The presence of a U.S. resident advisor in the DPAE would facilitate AID's continued involvement in this process.

- Additional data entry hardware for the Service Exterieur. The volume of data to be processed by SSD will place an enormous data entry workload on the recently installed minicomputer. The data collected during the February-May time period alone would require up to 10 months of data entry time for the 16 terminals reserved for that purpose. Every effort is being made to reduce sample sizes and to simplify questionnaires in order to reduce the data entry requirements. Nevertheless, given the expanding information needs of the Ministry, it is probable that the data entry bottleneck will continue. To preserve the timeliness of the statistical data collected, its summarization and publication must occur within a few weeks of data collection. One solution would be to install microcomputer data entry stations in provincial offices. The budget already includes $50,000 for this activity. An additional $50,000 in data entry hardware might be desirable.

  Documentation Center. Around $100,000 was originally budgetted in the project for the creation of a documentation center for current documents in project management and evaluation, economic analysis, and crop statistics. Around $70,000 is currently budgetted. The remainder will be made available depending upon the availability of funds and the ultimate resource needs of the center.

- Additional training. The DPAE has identified the needs for an additional M.S. degree for the Service Exterieur (around $55,000) and additional short-term U.S. training for Service du Projet and Service Exterieur staff (totalling $42,000 per person year).

- Remote sensing/satellite imagery. Additional funding for commodities and technical assistance for remote sensing and satellite imagery may be required, involving an expenditure of around $100,000.

Funds that become available in the future from the contingency, inflation, or other line items will be allocated to the priority items defined above, or to other activities identified by the DPAE or USAID. The decision as to the allocation of the funds will be made jointly by both parties within the context of the Annual Workplan and, if necessary, formalized in a Project Implementation Letter.

E. Evaluations

Evaluation is a built-in and crucial component of this project. It is designed to insure that project purposes and assumptions as stated in the logical framework are being attained. It is also to measure what changes have taken place and the impact of project over its life. There are three evaluations planned during the life of this project. These will include two mid-term evaluations (FY 1987 and FY 1990) and a final evaluation in FY 1993. Each evaluation will be conducted by an independent team of consultants with, if possible, the full participation of a member of the USAID/Morocco staff.

The objective of the FY 1987 and FY 1990 evaluations will be to evaluate the progress being made by the project in meeting its Goal, Purpose, and Output objectives and to suggest changes in project design and implementation that would improve its performance. In particular, the FY 1987 mid-term evaluation will assist USAID and the DPAE in identifying relative priorities among those activities for which funding decisions have been deferred (see Section D.4. above). The final project evaluation (FY 1993) will assess the success of the project, as a whole, in meeting its Goal, Purpose, and Output objectives, and will identify related tasks for which further USAID assistance is warranted. The technical assistance needed to carry out these evaluations will be contracted directly by USAID.

IV. COST ESTIMATES AND FINANCIAL PLAN

AID's major inputs into this project are the provision of long- and short-term technical assistance, long- and short-term training, and commodities and other supplies (largely high technology inputs such as computers, remote sensing equipment, aerial photography and photographic lab equipment). U.S. Local Costs are a total of $820,000 or approximately 6.5 percent of the total USAID contribution. These costs are primarily for the support of U.S. professionals in Morocco, including housing, transportation, and some office supplies.

The GOM contributions to this project are now estimated to be $9,817,000. (The original Project Agreement required a GOM contribution of $9,021,000). It is estimated that, of the total GOM contribution, around $9,664,000 will be in local currency and $153,000 in foreign exchange. The GOM contribution will cover the salaries of additional personnel assigned to the DPAE; international air fare for long-term participants; construction costs associated with site preparation for the minicomputer; aerial photography lab and objective yield lab, vehicle purchases; operation and maintenance; and office equipment and maintenance.

The Summary Cost Estimate and Financial Plan is shown in Table 5, the detailed AID contribution in Table 6, the GOM contribution in Table 7, and the Methods of Implementation and Financing in Table 8.

Because the method of payment is either direct payment or direct reimbursement, USAID does not at this time believe that a formal project-financed audit will be required. If subsequent reviews or observations indicate that an project-funded audit is necessary, one will be scheduled, using funds from the contingency line item. Because of delays in USDA/OICD billings and lack of details contained therein, USAID will request that the records for this Project to be included in the next routine audit of the USDA/OICD performed by the cognizant audit agency of the U.S. government.

TABLE 5: Summary Cost Estimate and Financial Plan ($000 U.S)

Category	AID		GOM		Total	
	FX	LC	FX	LC	FX	LC
Technical Assistance	3112	375	-	-	3112	375
GOM Salaries	-	-	-	1260	-	1260
Training	2304	143	-	69	2304	212
Construction	-	-	-	57	-	57
Commodities	5073	170	153	3036	5226	3206
Other	145	58	-	2398	145	2456
Contingencies	525	33	-	-	525	33
Inflation	588	41	-	2844	588	2885
	11,747	820	153	9,664	11,900	10,484

TABLE 6: Estimated Annual USAID Expenses for Project 608-0182 ($000) [1]

Category	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	Total
PERSONNEL												
Long term	-	112.6	546.0	429.0	848.5	357.5	70.0	10.0	10.0	10.0	5.0	2398.6
Short term	51.9	28.2	32.1	178.5	241.5	164.5	80.5	80.5	119.0	63.0	49.0	1088.7
TRAINING												
Long term	-	64.2	88.2	110.0	418.0	451.0	396.0	220.0	55.0	-	-	1802.4
Short term	-	-	2.6	70.0	106.8	147.0	101.5	73.5	-	-	-	501.4
English	-	7.2	13.8	21.9	30.0	30.0	25.0	15.0	-	-	-	142.8
COMMODITIES	-	7.8	148.4	2890.5	1634.7	324.1	110.8	62.2	58.7	3.0	3.0	5243.2
OTHER	-	-	6.2	27.1	68.0	8.0	2.0	47.0	2.0	1.5	41.3	203.1
CONTINGENCIES	-	-	-	-	238.4	148.2	78.6	50.8	24.5	7.8	9.8	558.1
Subtotal	51.9	220.0	837.3	3727.0	3585.9	1630.3	864.4	559.0	269.2	85.3	108.1	11938.3
INFLATION	-	-	-	-	118.0	150.0	122.0	107.6	66.3	25.8	39.0	628.7
Total	51.9	220.0	837.3	3727.0	3703.9	1780.4	986.4	666.6	335.4	111.0	147.1	12567.0

1/ Rows and columns may not add exactly due to rounding. See notes on following page.

Notes on Table 6 Calculations

1. Data for FY 1983 through FY 1986 are actual expenditures. Figures for FY 1987 through the PACD are projections. Data presented on a fiscal year basis.

2. Long Term Personnel includes $760,258 for both phases of the Agricultural Prices and Incentives Study and $63,072 for in-country administrative/secretarial support. Long term personnel costs are projected at $120,000 per person year.

3. "Short-term Personnel" includes a total of $420,904 in short term technical assistance dedicated to providing in-country training courses. Short-term personnel costs are projected at $3500 per person week.

4. Projected long-term training costs are based on an estimate of $88,000 for a Ph.D. and $55,000 for an M.S. The entire cost of obtaining a degree is allocated in the fiscal year in which the participant leaves for the U.S. university.

5. Short-term U.S. training costs are projected at $3500 per person month.

6. "Other" category is comprised of Local Currency Costs and Evaluation Costs. Some local commodity costs are included in the commodity line item of the budget. The evaluation needs for the project are estimated at $145,000, which would allow for three planned evaluations (FY 1987, FY 1990, and FY 1993).

7. "Contingencies" calculated at 10 percent per year. Since the contract for all of the FY 1987 aerial photography has been signed ($963,000), the contingency that this would have entailed has been reprogrammed.

8. Rate of inflation calculated at 4.5 percent per year, compounded annually.

TABLE 7: Estimated Annual DPAE Expenses for Project 608-0182 ($000) [1]

Category	1984	1985	1986	1987	1988	1989	1990	1991	1992	Total
PERSONNEL	60	150	150	300	300	300	-	-	-	1260
TRAINING -	1	3	5	10	10	10	10	10	10	69
CONSTRUCTION	-	-	23	34	-	-	-	-	-	57
COMMODITIES	215	169	405	400	400	400	400	400	400	3189
- Vehicles	125	104	355	300	300	300	300	300	300	2384
- Other Commodities	90	65	50	100	100	100	100	100	100	805
OTHER (Vehicle Operation & Maintenance)	278	250	215	255	280	280	280	280	280	2398
SUBTOTAL	554	572	798	999	990	990	690	690	690	6973
INFLATION	44	92	192	320	396	475	386	442	497	2844
TOTAL	598	664	990	1319	1386	1465	1076	1132	1187	9817

1/ See notes on following page.

Notes on Table 7 Calculations - GOM Contribution

1. These estimates were prepared by the DPAE. Figures for 1984-1986 are actual expenditures and those for 1987 are planned expenditures. Figures for 1988-92 are projected expenditures. An exchange rate of 9 dirhams/dollar was used in converting actual and projected figures to U.S dollars in all years. The GOM fiscal year is January 1 - December 31.

2. The total contribution shown, $9,817,000 exceeds that originally anticipated. However, the total GOM contribution, for purposes of the Project Agreement, will remain "not less than the equivalent of US $9,021,000", as established in the original Project Agreement.

3. Personnel costs calculated based on the number of new professional or technical staff (cadres) employed by the DPAE (including the Service Exterieur). Figures represent only the initial year's cost of the new employees (roughly 120,000 dirhams/person/year for salary, benefits, and related expenses). Includes 5 new cadres in 1984, 10 in 1985 and 1986, and a projected 20 cadres per year for 1987-1989. The total number of additional cadres will be 105. Note, however, that some of these will be transfers to the DPAE from other divisions within the Ministry of Agriculture. Currently, the DPAE has roughly 300 staff in the Service Central, of which 80-90 are professional/technical cadres. In addition, there are roughly 700 cadres in the DPAE's Service Exterieur (who officially answer to the heads of the Provincial Agriculture Departments - DPAs), of which 50-60 would be considered professional/technical cadres.

4. Training costs include international air transport and miscellaneous costs related to U.S. and third country training (roughly 10,000 dh per person).

5. Construction costs include: $23,000 for site preparation for the computer facilitiles in 1986, $23,000 for site preparation for the aerial photography laboratory in 1987, and $11,000 for site preparation for the objective yield laboratcry in 1987.

6. The DPAE has a fleet of around 155 vehicles, many of which are in the regional offices (Service Exterieur). Depreciation of these vehicles is estimated at 10 years. Thus, roughly 15 vehicles/year are needed to maintain the size of the fleet. Vehicles purchased include primarily Renault 4's, Land Rovers, Renault 9's.

7. The vehicle operation and maintenance item includes costs of gasoline (vignettes) and vehicle repairs.

8. Other commodity costs includes primarily paper and materials for survey questionnaires and office equipment and maintenance. It does not include office supplies or the maintenance of the physical plant.

9. Inflation estimated at 8 percent.

TABLE 8: Methods of Implementation and Financing - USAID

Methods of Implementation	Method of Financing	Approximate Value ($,000)	Percent
USDA/PASA for technical assistance, commodity procurement and training	Cost reimbursement	9,000	71.6
Technical Assistance - Host Country Contract, Prices and Incentives Study	Direct Letter of Commitment	760	6.0
Aerial Photography	Direct payment	1,800	14.3
Evaluation - short term technical assistance (IQC, AID TDY or direct contract	Direct payment	145	1.2
Private sector consultancy short term technical assistance and training (subcontracts by USDA)	Cost reimbursement	304	2.4
Contingency	To be determined	558	4.5
	Total USAID Contribution	12,567	100.0

ANNEX 1: Implementation Schedule *

Event	Responsibility	Date Completed
PP Authorized	AID/W	8/83
PROAG signed	USAID/GOM	9/83
PIO/T executed	USAID	11/83
Host Country Contract signed	contractor/GOM	4/84
PASA signed	AID/USDA	8/84
PASA field team arrives in country	USDA/USAID	8/85
Aerial photography (AP) contract signed	USAID/contractor	11/85
PASA workplan approved	DPAE/USAID	12/85
Host Country Contract complete	contractor/GOM	1/86
Aerial Photography Contract signed	USDA/contractor	3/86
USDA steering committee arrives in-country	USDA	4/86
Aerial Photography 86 campaign complete	UAM	5/86
Arrival and installation ADP equipment (minicomputer)	USDA/GOM	9/86
ADP installed and operating	contractor	10/86
PASA work plan approved	DPAE/USAID	11/86
Project modification authorized	USAID	12/86
PROAG Amended to reflect redesign	USAID	1/87
PASA amended to reflect redesign	USAID	1/87
AP lab installed and operating	USDA	1/87
Follow-on contract for Prices and Incentives Study signed	GOM	1/87
Arrival of Additional Agricultural Economist		5/87
Mid-term Evaluation	USAID	6/87
PASA work plan approved	DPAE/USAID	11/87
ASF Complete for agricultural provinces	USDA/DPAE	4/88
Follow-on Prices and Incentives Study completed	GOM	6/88
PASA work plan approved	DPAE/USAID	11/88
USDA Steering and Advisory Committees	USDA	5/89
Mid-term Evaluation	USAID	6/90
Annual work plan approved	USAID/DPAE	11/90
Annual work plan approved	USAID/DPAE	11/91
Annual work plan approved	USAID/DPAE	11/92
Final Evaluation	USAID	4/93

* Refer to the TDY/Training schedules and Annual Work Plans for more detailed implementation plans.

ANNEX 2: Indicative Levels of Effort of Short-Term Technical Assistance - Summary (Person Weeks) [1]

Category		1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	Total
SSD	TA	9	5	9	10	12	13	4	5	7	6	2	82
	Training	-	-	2	5	9	2	4	4	10	5	5	46
	Total	9	5	11	15	21	15	8	9	17	11	7	128
SE	TA	-	-	-	0	12	8	4	4	2	3	-	33
	Training	-	-	-	6	8	4	4	4	3	0	3	32
	Total	-	-	-	6	20	12	8	8	5	3	3	65
SPE	TA	-	-	-	-	3	4	2	4	4	2	-	19
	Training	-	-	-	-	5	4	3	-	4	0	2	18
	Total	-	-	-	-	8	8	5	4	8	2	2	37
SP	TA	-	-	-	-	12	8	2	-	-	-	2	24
	Training	-	-	-	-	8	4	-	2	4	2	0	20
	Total	-	-	-	-	20	12	2	2	4	2	2	44
Total[2/]	TA	9	5	9	10	39	33	12	13	13	11	4	158
	Training	-	-	2	11	30	14	11	10	21	7	10	116
	Total	9	5	11	21	69	47	23	23	34	18	14	274

1/ This schedule is indicative. The actual purpose of consultancies and training subjects will be detailed in the Annual Workplans.

2/ For budget purposes, technical assistance TDY costs for FY 1987-93 are estimated at US-$3500 per week (for both consultancy assistance and that to conduct in-country training courses). The total cost short-term technical assistance/training is estimated at approximately US-$1,888,700.

ANNEX 3: DPAE LONG-TERM TRAINING PLAN

Service	Degree and Major	1985	1986	1987	1988	1989	1990	1991	1992
SSD	1. M.S. Ag. Economics		Livestock Economics						
	2. M.S. Ag. Economics			Production Economics					
	3. M.S. Data Base Analysis			Stat/Data base					
	4. Ph.D. Statistics				Statistics/Sampling				
	5. M.S. Statistics				Ag Stat/Computer				
	6. M.S. Library Science				Documentation				
	7. Ph.D. Ag. Economics					Production/Policy Analysis			
	8. M.S. Statistics					Ag Stat/Data Base			
	9. M.S. Ag. Economics					Production/Marketing			
	10. M.S. Data Base Analysis					Computer Prog.			
	11. M.S. Statistics						Ag Stat/Data Base		
S. Ext	1. M.S. Ag. Economics			Agricultural Economics					
	2. M.S. Ag. Economics			Agricultural Economics					
	3. M.S. Ag. Economics			Agricultural Economics					

ANNEX 3: DPAE Long Term Training Plan (cont.)

Service	Degree and Major	1985	1986	1987	1988	1989	1990	1991	1992
SE	1. Ph.D. Ag. Economics	Prodn/Quanti Methods/Policy							
	2. M.S. Ag. Economics		Agricultural Finance						
	3. M.S. Ag. Economics			Econometrics					
	4. Ph.D. Ag. Economics				Prodn/Int'l Trade/Future Mkt.				
	5. M.S. Ag. Economics				Production Economics				
	6. M.S. Ag. Economics [1]				Agricultural Economics				
	7. M.S. Ag. Economics						Cost/Benefit Analysis		
	8. M.S. Ag. Economics						Agricultural Economics		
SPE	1. M.S. Ag. Economics		Production Economics and Econometrics						
	2. Ph.D. Ag. Economics			Ag. Finance and Benefit/Cost Analysis					
	3. M.S. Ag. Economics				Agricultural Economics				
	4. Ph.D. Ag. Economics					Econometrics and Linear Programming			
SP	1. M.S. Ag. Economics					Prod/Int'l Trade			
	2. M.S. Ag. Economics						Quanti Methods		
	3. M.S. Ag. Economics							Quanti Methods	

1/ M.S. (Agricultural Economics) for staffmember of the Service of Incentives to Agricultural Production (SI).

ANNEX 4: DFAE - Indicative U.S. Short-term Training Plan - (Person Months)

Service	Staff	Type of Training	1986	1987	1988	1989	1990	Total
SSD	1	Systems Engineering	2	2				
	1	Photo Interpretation Remote Sensing	12					
	1	Photo Lab Operation/ Maintenance		1.5				
	1	Statistics/Sampling			6			
	1	Data Base Management		3		6		
Subtotal	5							32.5
SE	1	Ag. Sector modelling			9			
	1	International Trade				9		
	1	To be determined					9	
	2	Micro computer maintenance		6				
Subtotal	5							33.0
SPE	2	Project Analysis and Implementation	6					
	4	Project evaluation		12	12	12	12	
Subtotal	6							54.0
SP	1	Agricultural Sector Planning			9			
	1	Pittsburgh Management Course				2		
Subtotal	2							11.0
S Ext	2	Statistics/Data Collection		6	6			
Subtotal	2							12.0
Total			20	30.5	42	29	21	142.5

ANNEX 5: JOB DESCRIPTION AND QUALIFICATIONS FOR THE AGRICULTURAL ECONOMIST FOR THE DIVISION DE LA PLANIFICATION

Description of Work

A senior agricultural economist will be placed in the Division de la Planification for a two year period beginning early in calendar year 1987. This person will work both in the Service de Projet and the Service du Plan, but most of his/her time will be allocated to the Service du Plan. The person's primary responsibility will be in the general area of agricultural economic analysis, project evaluation, and sector planning. The primary responsibility for the person will be to train the staff of the Division of Planning in doing applied economic analysis using modern quantitative methods and microcomputer hardware and software. It is envisioned that he/she will work on the following specific tasks:

1) Train the staff of the Division de la Planification in modern methods for economic policy analysis, microcomputer hardware and software use, and quantitative methods.

2) Assist in the creation of a system to formulate a national strategy for agricultural development.

3) Assistance in methods of analyzing agricultural policy alternatives and policy measures necessary to achieve agricultural production objectives.

4) Strengthen the capacity of DPAE in the area of analysis of agricultural supply response. This includes providing leadership to the Division du Plan in traditional quantitative approaches to supply response analysis, as well as providing a more micro (or farming systems) oriented approach to identifying constraints to increased agricultural production.

5) Assist with the coordination of the agricultural plan and the preparation and monitoring of agricultural projects.

The scope of work for the senior agricultural economist is not limited to these activities, but they do represent current high priorities for the DPAE's Division de la Planification.

Qualifications

The senior agricultural economist must have a Ph.D. in economics or agricultural economics and must have experience in agricultural planning activities and economic policy analysis in developing countries. The person must have training and experience in a macroeconomic analysis. The person must be strong in quantitative methods of economic analysis, and must have experience in mathematical programming as applied to agriculture problems. French language at the FSI 3 level is required.

ANNEX 6: GOM Request for Additional Technical Assistance

المملكة المغربية

وزارة الفلاحة

والاصلاح الزراعي

ROYAUME DU MAROC

MINISTERE DE L'AGRICULTURE
ET DE LA REFORME AGRAIRE

DIRECTION DE LA PLANIFICATION
ET DES AFFAIRES ECONOMIQUES

0024 DPAE/DAE/SSD.
0029

OFFICIAL FILE

Rabat, le 12 JAN. 1987

608-0182

ACTION : AGR
DUE DATE: 01/20
INFO: DIR DIDIR PROG -
RCO CONT-CHRON, RF.

OBJET : Demande d'assistance technique.

REFER : Projet USAID 608-0182.

Par la présente, j'ai l'honneur de vous transmettre la demande concernant une assistance technique supplémentaire dans le cadre du Projet 608-0182 en faveur du programme de Planification, des Statistiques et de l'Economie Agricole. Cette assistance qui entrainera un amendement de l'Accord de Don, comprendra :

1) les services d'un conseiller résident supplémentaire en Economie Rurale pour la Division du Plan de la Direction de la Planification et des Affaires Economiques (environ 24 personne /mois) de même que l'équipement nécessaire à la composante informatique, ou autre, à développer dans cette division.

2) le support de la seconde phase de l'étude des prix et incitations agricoles.

3) la modification de la composante formation du Projet, réduisant le nombre des participants à une formation de niveau PhD, et augmentant le nombre de participants à un niveau MS et celui des stages de formation à court terme aux Etats-Unis.

Les détails des modifications mentionnées ci-dessus ont été l'objet de discussions préalables avec la Division de l'Agriculture de l'USAID-Maroc. Selon les prévisions budgétaires actuelles, les modifications proposées peuvent être effectivement entreprises dans le cadre du niveau budgétaire actuel du Projet.

Veuillez agréer, Monsieur le Directeur, l'expression de ma parfaite considération.

P. Le Ministre de l'Agriculture
et de la Réforme Agraire
Le Secrétaire Général

Signé : Ahmed ALAOUI ABDELLAOUI

MONSIEUR Charles JOHNSON
DIRECTEUR DE L'USAID
AMBASSADE DES ETATS-UNIS
B.P. 120
- RABAT -

USAID/RABAT
C & R
12 JAN. 1987
RECEIVED
22

ACTION TAKEN

No Action Necessary _____

Replied by : _____

_____

_____

Initials & Date

ANNEX 7: Justification for Source/Origin Waiver - Vehicle Purchase

Waiver Control No. 608-86-17

PROBLEM:

The implementation of the Planning, Economics and Statistics for Agricultural Project (608-0182) requires the procurement of an additional vehicle not manufactured in the U.S. In order to allow such procurement, you are requested to grant: (A) A source/origin waiver from geographic Code 000 (U.S. only) to Geographic Code 935 (special free world) and (B) A waiver of Section 636 (i) of the FAA.

FACTS:

(a) Cooperating country	:	Morocco
(b) Authorized document	:	PROAG No. 608-0182
(c) Project	:	Planning, Economics, and Statistics for Agriculture
(d) Nature of funding	:	Development Assistance Grant
(e) Description of Goods	:	One(1) station wagon similar to a Peugeot 504 station wagon
(f) Approximate value	:	$12,500
(g) Probable source	:	Morocco
(h) Probable origin	:	France

DISCUSSION:

Under the Planning, Economics, and Statistics Project 608-0182, USAID MOROCCO is assisting the Directorate of Planning and Economic Affairs in the Ministry of Agriculture and Agrarian Reform to improve their capacity to gather and analyze statistics on the Agricultural sector, monitor and evaluate Agricultural projects, and to undertake economic analysis of factors affecting agriculture.

A team of AID financed statisticians are responsible for conducting probability sampling, objective yield analysis and "ground truth" evaluations throughout the provinces of Morocco. Successful realization of this activity is greatly dependent upon procurement of vehicles to provide the necessary mobility of this team.

JUSTIFICATION

Pursuant to Handbook IB, Chapter 5B 4a (2) a waiver of the authorized geographic code for the procurement of commodities may be authorized if "the commodity is not available from countries or areas included in the authorized geographic code."

In Morocco, and more specifically the country's remote areas, it is exceedingly difficult to find local repair services and spare parts for a U.S. manufactured vehicle should a U.S. motor vehicle break down. Several weeks may elapse before needed parts are received in-country. The loss of valuable time would severely hamper the gathering of vital

agricultural statistics and seriously delay project implementation. However, vehicles assembled in Morocco with parts of Code 935 origin are used extensively in the project area where the team will be operating. Of most importance, service facilities and spare parts for these Code 935 vehicles are readily available in the remotest rural areas, thereby expediting the team's efforts.

In accordance with section 636 (i) of the Foreign Assistance Act of 1961, as amended (the "FAA"), AID-financed vehicles must be manufactured in the United States unless "special circumstances" exist which will justify a waiver. HB IB Chapter 4c2d, states that circumstances which may merit waiving the requirements of Section 636 (i) include "present or projected lack of adequate service facilities and supply of spare parts for US manufactured vehicles."

The inability to adequately service vehicles of U.S. manufacture necessitates the use of vehicles of Code 935. Pursuant to Redelegation of Authority 113.3A, you have the authority to waive the procurement source and origin of project vehicles for up to $50,000 per transaction.

ANNEX 8: Revised Logical Framework for the Planning , Economics and Statistics for Agriculture Project

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Program Goal: To make available current information and sound analysis that will enable GOM officials to make policy decisions that will lead to increased agricultural production.	Measures of Goal Achievement: - Policy decisions taken which affect agriculture are based on DPAE analyses. - Increased agricultural productivity results from policy decisions that provide Moroccan farmers with incentives to produce efficiently.	Goal Achievement Verification: - Comparison of policy decisions made by the GOM and policy recommendations made by the DPAE	Goal Assumptions: - The value of sound economic analysis will be appreciated by GOM policy makers and thus have an impact on their policy decisions, as anticipated.
Project Purpose: To improve the GOM's ability to collect data and publish timely agricultural statistics, undertake economic policy analyses, and plan, monitor and evaluate agricultural projects.	End of Project Status: - An integrated and statistically valid data collection and processing system is established. - The DPAE is able to more accurately collect crop acreage and yield data by region and by crop. - The DPAE is able to undertake quality analyses on policy issues for GOM decision makers. - The DPAE is better able to monitor and evaluate development projects and programs. - The capacity of the DPAE to prepare multi-year plans and annual investment budgets for the agriculture sector is improved.	Purpose Verification: 1-Evaluation of the analyses, reports, and planning documents completed by the DPAE. 2-Evaluation of the effectiveness and accuracy of DPAE data collection efforts.	Purpose Assumptions: - GOM continues to provide resources for DPAE for data collection and analysis.

ANNEX 8: Revised Logical Framework for the Planning , Economics and Statistics for Agriculture Project (cont.)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assump
Outputs: 1-Area Sampling Frame (ASF) for agricultural surveys developed. 2-Program of regularly scheduled, national crop and livestock surveys based on use of ASF. 3-Expanded data processing capability of DPAE. 4-Aerial photography lab completed and aerial photographs taken of primary crop production areas. 5-Strengthened Objective Yield Survey Capacity. 6-Procurement and use of satellite data for improving crop and land use estimates and for ASF maintenance. 7-Agricultural Data Bank developed 8-Policy analyses completed. Models for analyzing agricultural data developed.	Magnitude of Outputs: 1-ASF System developed. 2-Surveys completed according to set schedule and results published. 3-Data Processing Hardware and Software in place and operational (1 mini-computer and 38 terminals/PCs). 4-One aerial photography laboratory completed and operational. Photography completed on at least 20,000 ha. 5-One central and one regional objective yield lab established. Objective Yield surveys routinely implemented and used to verify area sampling frame results. 6-Satellite data procured and analysed to improve yield surveys. 7-One data bank established in DPAE and connected to other sections of MARA. 8-Policy analyses completed for policy makers in areas such as the impact of subsidy policies, investment needs, and food consumption. The major studies assigned to DPAE by the GOM carried out, including studies on: - Value added in agriculture - Trade liberalization - Change in Price support system to align it with world prices - Representative farm modeling - Costs of agricultural production - Sector Studies - Ag Sector modeling for policy analysis - Subsidies and their impacts on agricultural production and consumption. - Requirements and financing of agricultural credit - Productivity of agricultural labor - Relationship between food imports and agricultural production.	Output Verification: 1-Examination of ASF materials and results. 2-Examination of methodologies and results of surveys. 3-Inspection of data processing facility and review of actual use. 4-Inspection of facility. Review of aerial photographs and analysis procedure. 5-Inspection of facilities. Review of data collection and analysis procedures. Review of published results. 6-Review of results and analyses, examination of ASF results. 7-Inspection of data bank records and contents. 8-Evaluation of studies. Discussions with other MARA agencies and foreign donors.	Output Assumptio

ANNEX 8: Revised Logical Framework for the Planning , Economics and Statistics for Agriculture Project (cont.)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
9-Strengthened planning capability for DP	9-Annual investment budget computerized. Budget control techniques improved. DP capacity to carry out economic policy analysis strengthened.	9-Evaluation of DP planning activities, budget preparation, analytical studies, etc.	
10-Adapted project monitoring and evaluation systems employed.	10-Monitoring and evaluation systems designed or adapted by DPAE staff will be used on all major MARA development projects.	10-Evaluation of DPAE monitoring and evaluation reports. Discussions with other MARA agencies and donors.	
11-Documentation Center	11-Physical existence of center/holdings.	11-Inspection of facilities.	

Project Inputs:	Implementation Target:
- USAID TOTAL	US-$12,567,000
Personnel	US-$3,487,300
Resident Personnel	12.5 person years
Short-term Personnel	98.0 person months
Moroccan Consultants	4.7 person years.
Training	US-$2,446,600
Ph.D. training	6 individuals
M.S. training	23 individuals
Short-term U.S. training	154 person months
Commodities	US-$5,243,200
Upper range mini-computer	1 system
Microcomputers	38 computers
Aerial Photography	24 million ha.
Aerial Photo Lab	1 system
Objective yield lab	1 system
Contingency, Inflation & Other Costs	US-$1,389,900 [1]

ANNEX 8: Revised Logical Framework for the Planning , Economics and Statistics for Agriculture Project (cont.)

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Project Inputs (cont.)			
- GOM TOTAL	US-$9,817,000		
Personnel	US-$1,260,000		
Training	69,000		
Construction	57,000		
Commodities	3,189,000		
Other	2,398,000		
Inflation	US-$2,844,000		

a/ Remaining contingency and inflation as of the end of FY 1986.