

PO-AD-7461
 1/10/76
 affairs

Proj. No. 9310244
 PH

Attachment A to H.O. 1025.1
 (TL S:172)

AID 1025.1 (1976) (PAGE 51451)
 NONCAPITAL PROJECT PAPER (PPOP)

PAGE 1 of 2 PAGES

I. PROJECT IDENTIFICATION

1. PROJECT TITLE Korean Simulation Model Advisory Service		APPENDIX ATTACHED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
3. RECIPIENT (specify) <input type="checkbox"/> COUNTRY _____ <input type="checkbox"/> REGIONAL _____ <input checked="" type="checkbox"/> INTERREGIONAL TA Bureau		2. PROJECT NO. (H.O. 1025.1) 931-11-140-244
4. LIFE OF PROJECT BEGIN FY 76 ENDS FY 76		5. SUBMISSION ORIGINAL 3/5/76 DATE _____ REV. NO. _____ DATE _____ CONTR./PASA NO. _____

II. FUNDING (\$000) AND MAN MONTHS (MM) REQUIREMENTS

A. FUNDING BY FISCAL YEAR	D. TOTAL \$	C. PERSONNEL		D. PARTICIPANTS		E. COMMODITIES \$	F. OTHER COSTS \$	G. PASA/CONTR.		H. LOCAL EXCHANGE CURRENCY RATE: \$ US (U.S. OWNED)			
		(1) \$	(2) MM	(1) \$	(2) MM			(1) \$	(2) MM	(1) U.S. GRANT LOAN	(2) CCOOP COUNTRY (A) JOINT (B) BUDGET		
1. FISCAL YEAR ACTUAL FY													
2. OPN FY 76	99	45	18				54	99	18				
3. BUDGET FY													
4. BUDGET +1 FY													
5. BUDGET +2 FY													
6. BUDGET +3 FY													
7. ALL SUBO. FY													
8. GRAND TOTAL	99	45	18				54	99	18				

9. OTHER DONOR CONTRIBUTIONS

(A) NAME OF DONOR	(B) KIND OF GOODS/SERVICES	(C) AMOUNT
AID		

III. ORIGINATING OFFICE CLEARANCE

1. DRAFTER K. Brundage, TA/AGR	TITLE Program Analyst	DATE 2/24/76
2. CLEARANCE OFFICER L. Hesser, TA/AGR	TITLE Chief/TA/AGR	DATE

IV. PROJECT AUTHORIZATION

1. CONDITIONS OF APPROVAL

2. CLEARANCES

BUR/OFF.	SIGNATURE	DATE	BUR/OFF.	SIGNATURE	DATE
PPC	A. Handley	3/2/76	TA/PPU	C. Molfetto	3/2/76
EA/EAA	B. Bundy	3/2/76	TA/PPU	J. Gunning	3/2/76

3. APPROVAL AAS OR OFFICE DIRECTORS

SIGNATURE Curtis Farrar	DATE 3/3/76	4. APPROVAL AID (See H.O. 1025.1 VI C) SIGNATURE	DATE
TITLE AA/TA		ADMINISTRATOR	AGENCY FOR INTERNATIONAL DEVELOPMENT

AGENCY FOR INTERNATIONAL DEVELOPMENT PROJECT PAPER FACESHEET TO BE COMPLETED BY ORIGINATING OFFICE	1. TRANSACTION CODE ("X" appropriate box) <input checked="" type="checkbox"/> Original <input type="checkbox"/> Change <input type="checkbox"/> Add <input type="checkbox"/> Delete	PP DOCUMENT CODE 3

2. COUNTRY/ENTITY
TA Bureau

3. DOCUMENT REVISION NUMBER

4. PROJECT NUMBER	5. BUREAU		6. ESTIMATED FY OF PROJECT COMPLETION FY 7 7
	a. Symbol TAB	b. Code 6	

7. PROJECT TITLE - SHORT (stay within brackets)
 Korean Simulation Model Advisory Service

8. ESTIMATED FY OF AUTHORIZATION/OBLIGATION
 a. INITIAL ^{mo. yr.} 4 | 6 b. FINAL FY 7 | 7

9. ESTIMATED TOTAL COST (\$000 or equivalent, \$1 =)

a. FUNDING SOURCE	FIRST YEAR FY _____			ALL YEARS		
	b. FX	c. L/C	d. Total	e. FX	f. L/C	g. Total
AID APPROPRIATED TOTAL						
(Grant)	(99)	()	()	(99)	()	()
(Loan)	()	()	()	()	()	()
Other 1.						
U.S. 2.						
HOST GOVERNMENT						
OTHER DONOR(S)						
TOTALS	99			99		

10. ESTIMATED COSTS/AID APPROPRIATED FUNDS (\$000)

a. Approp- riation (Alpha Code)	b. Primary Purpose Code	c. Primary Tech. Code	FY _____		FY _____		FY _____		ALL YEARS	
			d. Grant	e. Loan	f. Grant	g. Loan	h. Grant	i. Loan	j. Grant	k. Loan
TOTALS										

11. ESTIMATED EXPENDITURES

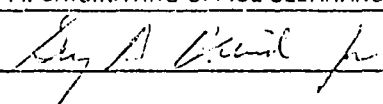
12. PROJECT PURPOSE(S) (stay within brackets) Check if different from PID/PRP

To provide limited assistance to the Korean Staff after the Michigan State University team departs. This will span the time gap until participants in training complete their studies and assume responsibility for project operation.

13. WERE CHANGES MADE IN BLOCKS 12, 13, 14, or 15 OF THE PID FACESHEET? IF YES, ATTACH CHANGED PID FACESHEET.

Yes No

14. ORIGINATING OFFICE CLEARANCE

Signature Leon F. Hesser 	15. Date Received in AID/W, or For AID/W Documents, Date of Distribution mo. day yr.
Title Director, TA/AGR	
Date Signed mo. day yr. 02 20 76	mo. day yr.

Part 2 Project Background and Detailed Description

A. Background

. Since 1970 a TAB funded research project has been active with Michigan State University (MSU) to Adapt and Test Simulation Models to Agricultural Sector Analysis. After considering several LDCs for practical application of the then newly developed technique, Korea was selected as the place for major emphasis. In a progressive manner the various steps of a computer model have been developed. Training of the Korean staff has been undertaken both on the job and at U.S. institutions. Approval and funding of the project will run out in June 1976.

During the period of the project, a computer model has been developed to cover many facets of Korean agriculture. Training of Korean staff to continue the periodic adjustments to the data bank has been part of the total project. USAID/Korea has assisted in participant training in the U.S. for staff members so that computer knowledge will be available. At present only one man out of five who have received 12 months of special training has advanced towards a M.S. degree. After considerable screening an individual was found to train for a Ph.D. degree. A list of the trained individuals is attached as Annex A. Thus a serious lack exists, in the short run, in the policy making and decision making level of the Korean model. The routine jobs of normal input have been adequately met with on-the-job training. The problem lies in the adjustment of programs to changing situations within the country and in new areas of investigation requested by the decision makers of the Korean government.

B. Detailed Description

A problem will arise when the MSU team departs and the students working for advanced degrees have not yet returned to Korea to work on this activity. This project is intended to finance one US computer advisor for an 18 month period to bridge this leadership gap. As a holding action, this US guidance will maintain the model with the middle level staff members until the ultimate Korean project leader is available. From the operational standpoint, this period will also cover the annual up-dating of production data and the adjusting for population change. The monitoring of these steps will insure that schedules are kept responsive to changing conditions and that revised analyses are prepared for the new conditions.

In the original trial development of the model for MSU purposes, the project paid computer rental for use of the Univac 1100 at the National Computer Center. More recently the advanced CDC Cyber computer at the Korean Institute of Science and Technology has been rented for \$45.75 per hour which was approved by AID/W Data Management Office. Some continuation of computer rental is programmed as the project tests new treatment of raw data and establishes additional

programs for testing alternative policy practices.

At present the Korean budget provides 3,000,000 won to cover associated equipment costs. The extent of total financial support is being determined so that adequate funds can be assigned in future Korean annual budgets.

Part 3. Project Analyses

A. Technical Analysis Including Environmental Assessment.

During the period of several years while the MSU team has worked in Korea, a varying number of Americans have been active in programming the model and adjusting the sources of original input data. A complete transition to no American advisors, as is planned in March 1976, could easily result in a period of stagnation and cause the system to lose its ability to reflect actual conditions in the country.

The people closely associated with the activity agree that a potential problem would result from a complete cessation of US assistance on a project with this degree of complexity. Thus this transitional arrangement is planned for a minimum degree of assistance to guide the Korean staff to a point where they have the capability to operate the analytical model on an independent basis.

1. From the technological implication, the planned effort is appropriate for the specific time and place of this activity. The project is presented for the minimum of U.S. technician effort and a limited time frame to provide the necessary transition. From the US standpoint, the plan is reasonably priced and designed.

2. This contribution makes full use of current technical developments and is aimed at creating a fully capable Korean staff by the time members have completed their advanced training and have assumed the responsibilities of leadership.

3. Since the working of the activity is based on offices and computers, there will be little influence on the environment in either a positive or negative nature.

4. The budget attached has been prepared with assistance from the MSU people who have been actively engaged in this type of work at this location. Thus the estimate is firm under the present known cost factors and will be adequate for the services desired. One administrative issue does arise on the purchasing of computer services in Korea.

The budget includes funds for computer use time for testing new approaches to data analysis. Past cases have indicated that a "Source Origin Waiver" would be required for the purchase of local services with US funds. This administrative requirement can be handled as has been done in the past.

5. This technical services grant of \$99,000 does not involve construction, financial planning or water and land resources construction. So the provisions of FAA Section 611 (a) and (b) are not involved.

B. Financial Analysis and Plan

1. Financial Viability

This activity is a nonrevenue producing project. The inputs by the Government of Korea (GOK) have been at a level that will insure that the model will be sustained when US assistance is terminated. Some 19 staff members are serving in counterpart positions to the present MSU team. With the eventual leadership of a Ph.D. scholar now in training in the US, a satisfactory team will be available on the GOK side. A side effect to the project has been a strengthening and adapting of the crop reporting system of the country. This national network of employees is a prime source of data input.

Early results of the project have guided the Government price policy for the barley crop. This considered for the first time an interaction between the rice and other grain crops when setting policy for barley. Other decisions are being formulated with computer trials being run to determine the impact of a range of possible actions.

It is difficult to place a monetary value on these outputs that will have an ever widening effect on the economic welfare of agricultural producers as interfaced with the consumer prices of urban dwellers. The growing impact of the model information in devising policy decisions will be most beneficial in terms of up-grading social goals and improving national income in terms of import levels of food and agricultural input items.

Sufficient computer hardware is available in Korea for model operation. Original programs made on the Univac 1108 at the National Computer Center have been processed on the more advanced CDC Cyber computer at the Korean Institute of Science and Technology. This action reduced a run of 1.5 years of information from 35 minutes to three minutes.

2. Financial Plan

US advisory assistance involves 18 months of service for one technician during the period July 1, 1976 to December 31, 1977.

The budget prepared to meet anticipated costs is:

Salaries	\$38,000 (18 months)
Overhead	11,780
Fringe benefits	6,460
Travel/transportation	24,122
Other direct costs	16,200
Allowances	2,400
	<u>\$98,962</u>

Rounded to \$99,000

All of the above funds are by US grant for technical services. The Other direct costs include an allowance of \$15,000 for computer fees that has been previously provided from the MSU contract and from USAID/Korea. During this transition stage the magnitude of the charges for model maintenance can be determined. Also the relationship between Korean institutions involved can be stabilized so that annual funding levels can be incorporated into the OOR budget system to sustain the model.

C. Social Analysis

Since this activity functions within the central bureaucracy of the government, there will be little direct diffusion to large numbers of people. The information provided by the model will be influential in developing policy decisions and may make alterations in relative power influence within branch of the government.

In the final policies announced to the public, any influence of model contributions will be submerged in the political nature of the announcements. In effect the model becomes an unseen tool of the policy makers.

D. Economic Analysis

This ongoing project has reached an initial development plateau. Efforts of this transitional assistance are to maintain the present effectiveness and organize the people concerned to prepare for further expansion and utilization of the output data.

Valuable segments of the national economy are involved. The grain management model will influence government programs on food imports and storage levels. Migration patterns will guide other economic programs.

The total project will assist in the substitution of resources to achieve higher social and economic ends. Better utilization of agricultural production can be effected in the implementation of national programs.

Part 4 Implementation Arrangements

A. Analysis of the Recipient's and AID's Administrative Arrangements.

1. Recipient

The AID advisor will be working with the Korean National Agricultural Economic Research Institute as a sole US representative following the departure of the MSU team. This individual will have several functions in working with the Korean staff. These duties include: (a) advise in procedural and organizational arrangements within the Institute, (b) review the results obtained from the model in terms of logical expectations and if corrective actions are needed, assist in refining the techniques being used, and (c) evaluating of the total model results and the utilization of the output.

A.2. AID

Limited assistance will be provided by USAID/Korea. Regular monitoring will be continued by TA/AG.

B. Evaluation for the Project

Because the small nature of this project, the evaluation process will be based mainly on periodic reports as specified in the contract. Comments will be solicited from USAID/Korea as to the caliber of results obtained and the impact of the advisor on the trend of project development.

Training Directly Related to KASS

<u>Name</u>	<u>Position</u>	<u>Type of Training</u>	<u>Dates of Training</u>	<u>Expected Date of Return-Korea</u>
Dr. Kim, Ho Tak	Assistant Professor Seoul National University (NAERI contract)	Development Analysis Study Program	Sept 1973 - Sept 1974	returned
Dr. Lee, Jeung Han	Professor Chinju University (NAERI contract)	Ph.D. Agr. Econ	Sept 1971 - Oct 1974	returned
Dr. Yoo, Jong Tak	MAI	Ph.D. Agr. Econ	June 1972 - May 1975	returned
Mr. Kim, Dong Min	KASS Division Director NAERI	Development Analysis Study Program	Sept 1973 - Sept 1974	returned
Mr. Kim, Sang Gee	KASS/NAERI	Development Analysis Study Program	Sept 1974 - Sept 1975	returned
Mr. An, Chang Bok	KASS/NAERI	Development Analysis Study Program	Sept 1974	Jan 1976
Mr. Lee, Sang Won	KASS/NAERI	Development Analysis Study Program MS Systems Science	Sept 1974	June 1976
Mr. Kim, Young Sik	KASS/NAERI	Ph.D. Agr. Econ.	Sept 1972	Sept 1976
Mr. Lee, Sang Mu	MAF	Nondegree Agr. Econ.	Sept 1975	Sept 1976
Mr. Park, Sung Joo	KIST	Ph.D. Sys. Sci.	Sept 1975	Sept 1977
Mr. Moon, Ki Han	MAF	Nondegree Agr. Econ.	Sept 1974 - June 1975	returne
Mr. Rhee, Hyung Jai	Control Data/Korea No job upon return	Ph.D. Economics	June 1973	June 1977
Mr. Choi, Young	KDI	MS Agr. Econ.	June 1974	Jan 1976