

AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT DATA SHEET

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

2. COUNTRY/ENTITY: **RWANDA**

3. PROJECT NUMBER: **696-0126**

4. BUREAU/OFFICE: **AFR** 101

5. PROJECT TITLE (maximum 40 characters): **Agricultural Surveys and Policy Analysis**

6. PROJECT ASSISTANCE COMPLETION DATE (PACD): MM DD YY **09/30/91**

7. ESTIMATED DATE OF OBLIGATION (Under 'B' below, enter 1, 2, 3, or 4)
 A. Initial FY **86** B. Quarter **4** C. Final FY **91**

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

A. FUNDING SOURCE	FIRST FY 86			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	1,500		1,500	7,000		7,000
(Grant)	(1,500)	()	(1,500)	(7,000)	()	(7,000)
(Loan)	()	()	()	()	()	()
Other U.S.						
1.						
2.						
Host Country		3,100	3,100		3,100	3,100
Other Donor(s)						
TOTALS	1,500	3,100	4,600	7,000	3,100	10,100

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) ARDN	292	052		0		1,500		7,000	
(2)									
(3)									
(4)									
TOTALS				0		1,500		7,000	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each): 100 200

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each):
 A. Code: BR BL BS R/AG TNG
 B. Amount: _____

13. PROJECT PURPOSE (maximum 480 characters):
 To improve the Government of Rwanda's policy formulation for Rwanda's rural economy.

14. SCHEDULED EVALUATIONS: Interim MM YY **09/82** Final MM YY **06/91**

15. SOURCE/ORIGIN OF GOODS AND SERVICES: 000 C41 Local Other (Specify) _____

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

17. APPROVED BY: Signature **Emerson J. Melaven** Title **AID Representative** Date Signed MM DD YY **08/28/91**

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

AGRICULTURAL SURVEYS AND POLICY ANALYSIS
PROJECT PAPER
(696-0126)

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AGRICULTURAL SURVEYS AND POLICY ANALYSIS PROJECT

1. SUMMARY AND RECOMMENDATIONS

1.1. Project Objectives and Description

The goal of the Agricultural Surveys and Policy Analysis Project (ASPAP) is to increase productivity and employment on and off the farm. The project purpose is to improve policy formulation for the rural economy.

ASPAP will pursue these objectives by assisting the Government of Rwanda in the collection and analysis of a variety of data (e.g. economic, social, and agricultural), which will improve the information base from which policy is formulated for the rural economy. Through various research, training, and information dissemination activities, the project will focus on strengthening the statistical and analytical capabilities of the Agricultural Surveys and Statistics Service (SESA -- Service des Statistiques et Enquetes Agricoles) of the Ministry of Agriculture (MINAGRI), the Direction Generale of Statistics of the Ministry of Plan (MINIPLAN), and the Direction Generale of Economy of the Ministry of Finance and Economy (MINIFINECO).

Outputs of the project will be:

- Rwandan staff trained in data collection and analysis, having the capacity to do periodic and special surveys on key policy issues and present results in ways that will enable decision makers to determine the trade-offs of the choices involved;
- An established and maintainable integrated data base which can be used to undertake analysis of the rural economy for policy makers;
- Analyses and publications, based on periodic surveys and special studies, which respond to the questions and informational needs of policy makers;
- A second National Agricultural Survey (in 1989, following the population census and, perhaps, based on the area sample frame technology); and,
- SESA capacity to provide expert consultant services to data users and other statistical services of GOR agencies on survey design, sampling techniques, data processing and analysis.

Project inputs, to be provided to all three ministries but largely to MINAGRI, include technical assistance, commodities, training, and local cost support. In addition, the project will construct a small extension of the SESA office building. Technical assistance will include long-term resident advisors, and short-term advisors who will be programmed in response to evolving ministry needs. Commodities will consist primarily of computer hardware and software and vehicles. International long-term training (masters degrees) will be in such fields as agricultural economics and

statistics. International short-term and in-country training will be in such areas as survey methods, management, and computer methods. AID's contribution to local costs, which will be for various operating expenses (e.g. fuel, vehicle and computer maintenance), will be phased out over the life of the project as the GOR contribution increases.

FINANCIAL PLAN

<u>Project Inputs</u>	<u>USAID (\$1000)</u>	<u>GOR (\$1000 equivalent)</u>
Technical Assistance	2,720	1,084
Evaluation & OAR Mgt.	196	
Commodities & Housing	1,217	
Construction	90	
Training	869	
Local Costs	733	968
Inflation & Contingencies	1,175	1,048
Total (rounded)	7,000	3,100

1.2. Background

The project will greatly benefit from the experience of its predecessor, the Agricultural Survey and Analysis Project (ASAP). ASAP, which began in May 1981 and whose PACD is March 30, 1987, helped the GOR to establish SESA at MINAGRI. A 1985 evaluation of ASAP observed that the project has succeeded in developing Rwandan capability in MINAGRI to undertake agricultural surveys and data processing. SESA is viewed in the GOR as the most credible source of information on the agricultural economy. The evaluation also pointed out that more input from agricultural economists is needed at SESA, as well as further development of Rwandan skills for in-depth analysis of agricultural data.

Other experience gained from the predecessor project and from other AID activities in Rwanda makes clear that although SESA and MINAGRI are crucial to the GOR's efforts to obtain information for making policy on the agricultural sector, other GOR agencies play important roles as well in data collection, analysis, and policy making for this sector. Especially important, experience shows that more attention must be paid to assuring that studies feed into the policy making process, and that they not simply be relegated to shelves.

Based on this experience, the Agricultural Surveys and Policy Analysis Project will redirect ASAP-initiated activities in various ways. First, its assistance to SESA will focus more on data analysis. Second, although the project will devote most of its resources to MINAGRI, it will allocate

some to MINIPLAN and MINIFINECO, which are also key ministries in GOR policy making for the rural economy. In addition, ASPAP will work more to inform GOR policy makers by actively engaging them in the defining of project activities.

1.3. Grantee and Executing Agencies

The grantee will be the Government of Rwanda, represented by the President of the Interministerial Coordination Committee for Rural Development and Health (CIC/RD). Project-supported activities will be carried out by MINAGRI, MINIPLAN, and MINIFINECO, and by other GOR agencies if agreed upon by the CIC/RD and by AID.

1.4. Recommendations

1. A grant in the amount of \$7.0 million over a five-year period commencing September 1986 should be authorized to the Government of Rwanda for execution of the Agricultural Surveys and Policy Analysis Project.

2. OAR/Rwanda should procure the services of six long-term technical advisors (approximately 16 person-years) and several short-term advisors (approximately 40 person-months) through an openly competed contract with a U.S. institution (e.g. university or private firm).

1.5. Summary Findings

The design team has examined the institutional, technical, economic, and social implications of the project's activities. The findings from these analyses have been incorporated into the project design, and all project activities are considered feasible and beneficial.

1.6. Project Issues

Following is a list of issues resulting from REDSO/ESA's review of the PID (see Annex A):

1. Selection of the institutional form and location of SESA. A consultant was recruited to investigate this issue, and his conclusion, included in the Institutional Analysis, is that SESA should maintain its semi-autonomous state within MINAGRI. This is, in fact, the approach being carried out by MINAGRI. The institutional analysis also points out that SESA is a key player in MINAGRI's decision making process. Further, the analysis recommends that MINAGRI assume an increasing share of SESA's recurrent costs, which has been accepted by the ministry (see Section 3, Cost Estimate and Financial Plan, and Annex F, Detailed Budgets).

2. Mix of technical assistance. The project's mix of long and short-term technical assistance is designed to improve the quantity and quality of analysis on the rural economy provided to GOR policy makers. Improvement in the supply of quality analysis will help increase its demand by policy makers. Long-term TA is weighted largely towards analysis, and short-term TA will be programmed in response to evolving needs of GOR policy makers.

3. GOR data collection activities. The Institutional Analysis (Annex E.1) describes the data collection activities of various GOR agencies. The Technical Analysis (Annex E.2) discusses in further depth the data collection activities and methods of SESA. All of the analyses make recommendations for data collection activities to be supported by the project. The activities presented in Section 2.7, Project Elements, conform with those recommendations and were agreed upon after a seminar at SESA and numerous discussions at all the participating ministries.

4. Role of SESA vis a vis other GOR agencies, and possible linkages. Under the phase I project, ASAP, SESA has proven itself as a consultant in data collection matters to other GOR agencies. ASPAP will promote SESA's linkages at the technical level with the other GOR agencies involved in data collection and participating in the project, MINIPLAN and MINIFINECO, by creation of a Project Technical Group. It will also promote the efforts of these three agencies to inform policy at the interministerial level.

5. Waivers and consideration of the Gray Amendment. A source/origin waiver (for AA/AFR approval) for procurement of vehicles and motorcycles is included as Annex H. The Implementation Plan also calls for a source/origin waiver for procurement of computers. Some commodity procurement is set aside for a Gray Amendment PSA under IQC with AID/W, and bidders for the TA institutional contract are encouraged to utilize Gray Amendment entities in subcontracting.

6. Budgeting. The GOR contribution to total project costs is about 30%, well in excess of the required 25%. A 5% inflation factor (compounded) and 5% contingency factor are included in the AID contribution, and a 10% inflation factor (compounded) and 10% contingency factor are included in the GOR contribution. These rates are consistent with projections for U.S. and Rwandan economic conditions.

1.7. Major Condition Precedent and Covenants

Condition Precedent -- Activities to be Conducted under Annual Work Plans

Prior to the disbursement of funds under the Grant, or to the issuance by AID of documentation pursuant to which disbursement will be made for local cost support for each of the Cooperating Country's Participating Agencies (as defined in the Amplified Project Description of the Project Agreement) for each year of the project, the Interministerial Coordination Committee for Rural Development and Health (CIC/RD) will furnish to AID, in form and substance satisfactory to AID, a Project Annual Work Plan.

Covenant -- Interministerial Coordination Committee for Rural Development and Health

The Cooperating Country will ensure that the CIC/RD develops strategy guidelines for a multi-year program of data collection and policy analysis on the rural economy and takes steps to assure that Project Annual Work Plans are consistent with the strategy. The Cooperating Country agrees that AID will participate in the review of the strategy guidelines.

The Cooperating Country will also ensure that the CIC/RD will review and approve jointly with AID the Project Annual Work Plans as submitted by the Project Technical Group and assure that these plans are consistent with its strategy guidelines.

Covenant -- Project Technical Group

The Cooperating Country will ensure that a Project Technical Group is established, with representatives appointed from the three participating ministries, with the mandate to: develop work plans consistent with the strategy guidelines issued by the CIC/RD, review survey proposals, standardize survey methodologies, promote collaboration on survey activities, discuss research results, organize seminars and workshops, forward current analysis to policy makers, and prepare the Joint Annual Work Plans and submit them to the CIC/RD.

Covenant -- Participant Training

The Cooperating Country agrees to nominate all persons for long-term training in a timely manner.

The Cooperating Country agrees to provide travel documents to persons nominated for long-term training in a timely manner.

The Cooperating Country agrees to establish arrangements to assure that all personnel completing long-term training under the Project will return to Rwanda to serve as employees of the respective Participating Agencies and that such personnel are promptly assigned to positions commensurate with the training and experience they have received under the Project.

The Parties agree that funds planned for long-term training will not be used for other Project activities.

Covenant -- Counterpart Personnel

The Cooperating Country agrees to recruit and hire or reassign all Rwandan personnel necessary in a timely manner to implement the Project. The Cooperating Country further agrees to name such personnel in the first Project Annual Work Plan.

Covenant -- Local Costs

The Cooperating Country will ensure that the Participating Agencies allocate funds to the Project, and assume increasing responsibility for local cost budgets in the amounts and for the purposes specified in Annex 1 of this Agreement.

2. RATIONALE AND DESCRIPTION

2.1. Overview

In Rwanda, the major issues confronting agricultural policy makers and research planners stem from the adjustments which rural people are being forced to make in response to dramatic changes in their environment. Population pressures are exerting a multitude of influences on the rural economy. The average farm size is decreasing as holdings are increasingly fragmented. More people are now without land and migrant labor is increasing. The cropping pattern is shifting away from grains to less nutritious roots and tubers. The wetlands (marais) are being used more intensively and land tenure problems are surfacing. Many parents believe that their children will not have a future in farming. The adjustments that were possible 10-20 years ago to the same but less pronounced pressures are no longer possible today. Production can not much longer be increased by bringing new land under cultivation. Instead, means must be found to increase yields, especially of food staples. Livestock must be better integrated into the farming system. Land must be used with greater care given to problems of fragile soils subject to erosion and declining fertility. Reforestation efforts must be stepped up, with greater emphasis on more efficient land use, such as through alley cropping or other agro-forestry methods. Watersheds have to be protected and the marais must be carefully managed. People who no longer have land must find alternatives to farming in productive employment. In sum, there is a great need to use Rwanda's land and human resources more efficiently and productively.

To help meet these objectives, Rwanda must be well served by policy and research. Good policies are needed to improve incentives and promote efficiency. Research is needed to generate appropriate technologies for increased productivity.

Both the policy and research systems are now being reformed in Rwanda. With donor support, primarily from the World Bank and AID, agricultural research is being restructured to more directly meet the needs of farmers. Under the Policy Reform Initiatives in Manufacturing and Employment Program (PRIME) policy changes are promoting private enterprise and the market economy. To be successful both reforms require an information and data base to enable policy makers to understand better the consequences of their decisions.

Significant progress has been made in the reform of research with the adoption of a farming systems approach. However, more progress is needed in the policy area. The process of policy formulation is in flux as the GOR moves toward decentralization. Responsibility for policy making is being slowly devolved from the President's Office to the the ministries under the framework of seven Interministerial Coordination Committees (CICs). In the next plan period responsibility for program and policy implementation will be devolved from the central ministries

to the prefectures and communes. Responsibility for planning and policy formulation will be more fully vested in concerned ministries. For example, policies bearing on the rural economy will be made primarily by the Ministry of Finance and Economy (MINIFINECO), the Ministry of Plan (MINIPLAN), and the Ministry of Agriculture, Livestock and Forests (MINAGRI) through their membership on the CIC for Economic Policy and the CIC for Rural Development.

At present policy formulation is hampered by limited data on the rural economy and the inability to analyze and present information to decision makers. Policy formulation is restricted to fiscal and monetary measures to affect primarily the budget and the balance of payments in the short run. Policies are rarely, if ever, formulated for their effects on economic variables such as productivity, employment, savings, investments and enterprise development, especially in the rural sector. The Agricultural Surveys and Policy Analysis Project (ASPAP) seeks to address this shortcoming by following on the work of the AID-funded Agricultural Survey and Analysis Project (ASAP), the policy studies now being done under PRIME and the diagnostic surveys of various farming systems projects throughout Rwanda.

As explained in the January 1985 evaluation, ASAP has made significant progress in the collection and tabulation of data on the agricultural sector. A well trained and motivated cadre of field enumerators and supervisors is in place at the Agricultural Surveys and Statistics Service (Service des Enquetes et Statistiques Agricoles -- SESA) in MINAGRI. As a result, the turn-around time for designing, fielding and processing a questionnaire on a representative sample of the rural sector is only 4-6 weeks. Unfortunately, the time needed to analyse and present the findings of a survey is quite long due to an insufficient number of trained analysts to participate in the design of the survey as well as in the presentation of its results. Thus while SESA's data collection and tabulation sections are now fully staffed by Rwandans and assisted by expatriate advisors, its analysis section is only beginning to be established and supported.

With much less support than SESA, the survey and analytical capabilities of MINIPLAN and MINIFINECO in areas related to the rural economy are also weak.

As described below, a major objective of this project is to strengthen the analytical capability in these three ministries, especially in the policy areas. The expatriate and Rwandan analysts trained under ASPAP will work closely with decision makers in their ministries to identify and inform key policy areas of concern. To assure that this occurs, special policy studies will be undertaken early in the project on issues about which decision makers are now most concerned. For example, a food acquisition and trade policy is now of paramount importance as food aid and commercial food imports (notably rice) have caused serious market distortions and disincentives to producers. Also, agricultural pricing policies are being reviewed with a view to promoting the profitability of agro-industry.

In sum, the relation between data collection/analysis and policy making, although complex and difficult to predict, will be strengthened by two forces. First, with decentralization of the policy process to key central ministries, primary responsibility for decision making will move away from the President's Office towards the workplace of professionals and technicians. Second, this project will give much greater emphasis than its predecessor to the formation of a cadre of Rwandan professional policy analysts.

To inform the policy making process, under ASPAP an information system on the rural economy will be established, analyzed and reported. Major elements of such a data base are already at hand: the National Agricultural Survey completed under ASAP, various natural resource-related surveys completed under the Ruhengeri Resources Analysis and Management Project (RRAM), various studies under the PRIME such as the Household Budget and Consumption Survey, demographic surveys, and a multitude of other sources, including various farming systems projects. These surveys are helping to identify the major structural features of the rural economy and the nature of production at the local level. However, more information and analytical work are needed to understand such basic issues as why certain economic activities are being undertaken in particular agro-ecological zones, the incentives which motivate farmers, the costs they incur and the problems they face at the farm level. Without this information it will be difficult to assess and demonstrate the feasibility of interventions and technological recommendations.

To improve the information base from which policy is formulated in the agricultural sector, the Agricultural Surveys and Policy Analysis Project will assist the Government of Rwanda (GOR) in the collection, assembly, analysis, and presentation of a variety of data (e.g. economic, social, agronomic) on the rural economy. Through various research, training, and information dissemination activities, the project will increase both the supply of quality information to decision makers and their demand for it.

In building on the accomplishments of the Phase I project, ASAP, and other data collection activities, ASPAP will focus on strengthening the statistical and analytical capabilities in SESA of MINAGRI, the Direction Generale of Statistics of the Ministry of Plan (MINIPLAN), and the Direction Generale of Economic Policy of the Ministry of Finance and Economy (MINIFINECO). Project-promoted collaboration among these agencies at the technical and policy levels will help assure that information from existing data sources and future surveys and studies will be comparable but not redundant, and that data will be used by policy makers in their decisions.

To further develop this information system, the project will proceed on two fronts: special studies designed to inform specific policy issues as they are defined by decision makers; and larger or periodic survey activities to characterize the rural economy and its evolution over time.

The first of these approaches especially will require responsiveness and flexibility on the part of project implementors. Project resources will need to be programmed for studies only some of which now can be planned and considered to be of high priority. In dialogue with the GOR, and respecting GOR priorities, donors and others interested in the development of the rural economy can make proposals during the life of project concerning the choice of studies to be undertaken.

The second approach will require that various data sources, including formal sample surveys as well as informal and traditional surveys, be combined into data sets which can be analyzed in a systematic way. Particularly valuable will be integration of production data from the National Agricultural Survey with consumption, nutrition and income data from the Household Budget and Consumption Survey. This would in turn permit an analysis of the relation of expenditures on various commodities to numerous variables such as farm size, cropping pattern, income and employment. Demographic variables can be incorporated into the analysis to determine the relation between family size, resource availability, and income, labor, calorie, and protein availability. Price information can be related to production and marketing. These are but some examples of how information from disparate sources, combined in a single data set, can be used to increase our knowledge of the rural economy. At the same time gaps in our knowledge will be revealed. This will help to determine which additional information is needed for policy formulation and research planning in the future.

Progress is already being made in integrating these two large data sources in one information base. SESA will soon make operative the most powerful computer hard and software system available in Rwanda. The capacity of this system is such that it can easily integrate the data sets of most surveys undertaken to date. Under the PRIME program and the on-going ASAP, expertise and other resources are being provided to complete tabulation of the survey results and to establish an integrated data base. By the time this Phase II project becomes operational, a full-scale program of analysis on this data base can be implemented.

2.2. Conformity with GOR Development Objectives

Rwanda is at a crucial stage in the evolution of its development strategy. The economic policies which served the country well in the 1970s are being reexamined as a result of the economic crisis of 1981-1983. The precipitous decline in world coffee prices in 1981 not only contributed to a balance of payments deficit of \$40 million, the first such deficit in many years, but also held down growth of government revenues. This occurred just as large wage increases were introduced and major commitments were undertaken in the education sector, thereby putting the budget into deficit for the first time.

In order to restore equilibrium without resorting to excessive foreign borrowing, the GOR instituted in March 1983 a number of import and price restrictions. These austerity measures were effective in restoring balance of payments equilibrium in spite of a drought in 1984. At the budget level, improvements have been realized in both expenditure control and revenue collection. However, the impact of the austerity regime on national income has been fairly sharp, reducing the rate of growth of GDP between 1982 and 1984.

The GOR's desire to address the current situation and set the stage for economic recovery and sustained growth during the next five-year plan, beginning in January 1987, is being exhibited in its broad examination of development goals and objectives. High priority objectives that have emerged from this assessment include increasing agricultural productivity to attain food self-sufficiency and increasing opportunities for rural off-farm employment. Since early 1985 the GOR has been formulating a coherent set of policy measures under an economic recovery program designed to further these goals. The GOR's commitment to reform is also evidenced by measures proposed in its policy guidelines for the next five year plan. These measures include provision of incentives to promote small and medium-scale rural enterprises and liberalization of the trade and payments regime. Also, given that there was no GOR population policy before 1981, plans to reduce average family size from 8.4 to 6.0 members by the end of the plan period is another indicator of the GOR's commitment to reform. Other measures remain to be identified as more information is collected and analyzed.

This project will support the GOR's efforts to achieve economic recovery and sustained growth by providing it the means -- data collection and analysis -- to examine the viability of government development objectives and the appropriateness of alternative policies to attain them. By assisting the GOR to analyze agricultural production, off-farm employment, nutrition, and other aspects of the Rwandan economy, the project will help the GOR define objectives and assess alternative interventions.

2.3. Conformity with OAR/Rwanda Strategy

OAR/Rwanda's assistance strategy is at present being redefined. As stated in the 1985 CDSS Update, the OAR's objectives were to increase per capita food production and improve the health status of the Rwandan family. However, in response to several recent events, the FY 88 ABS modified these objectives to be: increased employment and income especially of the rural population through the promotion of private enterprise and increased agricultural production by raising the productivity and profitability of farming. Work later this year on the Social and Institutional Profile and CDSS will help the OAR to specify its strategy and program in a more detailed fashion. The Agricultural Surveys and Policy Analysis Project will support these objectives by allowing the OAR and GOR to monitor whether these objectives are being achieved.

2.4. Experience from Agricultural Survey and Analysis Project

This project will greatly benefit from the experience gained from the Phase I project, ASAP. ASAP, which began in May 1981 and will end March 30, 1987, helped the GOR to establish SESA at MINAGRI. The project assisted SESA in developing agricultural data collection and analysis capabilities, and it helped SESA to undertake a number of surveys, including the National Agricultural Survey in 1984. The 1985 evaluation of that project highlighted the quality of both the data collection effort and the institutional mechanism established for collecting, processing, and storing agricultural data. SESA is viewed in the GOR as the most credible source of information on the agricultural economy. The evaluation observed that ASAP has succeeded in developing Rwandan capability in MINAGRI to undertake agricultural surveys and data processing. Subsequent project reviews have confirmed this, but the evidence in fact is even more convincing -- GOR agencies and other donors have frequently sought SESA assistance in conducting surveys.

The evaluation also discussed shortcomings of ASAP. Most important among these were insufficient provision of agricultural economists' input to SESA, and insufficient development of Rwandan skills at SESA for in-depth analysis of agricultural data.

Other experience gained from the predecessor project and from other OAR activities in Rwanda makes clear that although SESA and MINAGRI are crucial to the GOR's efforts to obtain information for making policy on the agricultural sector, other GOR agencies play important roles as well in data collection, analysis, and policy making for this sector. Especially important, experience shows that more attention must be paid to actually having studies feed into the policy making process, and that they not simply be relegated to shelves.

Based on the above, the Phase II project will redirect ASAP-initiated activities in various ways. First, while it will continue to provide assistance to all three units of SESA -- data collection, data entry into computers, and data analysis -- it will focus more on the last of these. Second, although the project will devote most of its resources to SESA, it will allocate some of them to other agencies in addition to MINAGRI that are also involved in agricultural policy, notably MINIPLAN and MINIFINECO. At the same time, the project will promote collaboration among these agencies. In addition, ASPAP will work more to inform GOR policy makers by actively engaging them in the defining of project activities, by emphasizing timely presentation of results, such as in readable publications and in well-attended seminars, and by taking advantage of the CIC mechanism, whereby project activities will automatically feed into the policy making process.

2.5 Linkages to Ruhengeri Resources Analysis and Management Project

ASPAP is expected to benefit from linkages to the second phase of the Ruhengeri Resources Analysis and Management Project (Project

No. 698-0427). Phase I of RRAM (PACD September 30, 1986) carried out resource inventory and assessment activities in the Ruhengeri prefecture. Under Phase II, which will extend from October 1, 1986 to September 30, 1988, RRAM will use this information to assist the GOR in land use management and evaluation. This will be a means of monitoring the impact of agricultural policy, especially extension themes, and is very much compatible with the objectives of ASPAP.

A recent evaluation of RRAM pointed out that its activities have not yet been institutionalized within the GOR. Although there is no single GOR agency charged with environmental affairs or resource management, MINAGRI is clearly the best "institutional home" for the second phase of RRAM since it focuses on land use issues. Since ASPAP will also provide information related to land use, there appears to be great scope for integrating data and analysis from these two activities to provide a more complete picture of the rural economy to policy makers.

2.6. Project Objectives

The goal of the Agricultural Surveys and Policy Analysis Project is to increase productivity and employment on and off the farm.

The project purpose is to improve policy formulation for the rural economy.

Outputs of the project will be:

1. Rwandan staff trained in data collection and analysis, having the capacity to do periodic and special surveys on key policy issues and present results in ways that will enable decision makers to determine the trade-offs of the choices involved;
2. An established and maintainable integrated data base which can be used to undertake analysis of the rural economy for policy makers;
3. Analyses and publications, based on periodic surveys and special studies, which respond to the questions and informational needs of policy makers;
4. A second National Agricultural Survey, perhaps based on the area sampling frame technology if pilot tests demonstrate feasibility, and after completion of the National Population Census scheduled in 1988 (National Agricultural Survey to be in 1990, follows first one completed under ASAP in 1984); and
5. SESA capacity to provide expert consultant services to data users and other statistical services of GOR agencies on survey design, sampling techniques, data processing and analysis.

By the end of the project, it is expected that the following will have been achieved:

1. Improved agricultural policies and project interventions;
2. Increased demand of policy makers for information and analysis on the rural economy;
3. Stronger role of MINAGRI in agricultural policy formulation;
4. SESA and other project-supported GOR research units recognized as responsive to needs of policy makers;
5. Improved collaboration among GOR agencies and donors involved in provision of data and analysis and in policy formulation for the rural economy;
6. An on-going dialogue established among professionals of the project and members of the technical level of the Interministerial Coordination Committees (CICs) on Rural Development and Economic Policy; and
7. A more informed GOR-OAR policy dialogue based on project-supported surveys and study results.

Unlike more production-oriented projects, it will be difficult, if not impossible, to quantify these achievements. While targets might be set for numbers of surveys and special studies to be completed under the project, this would be misleading. Periodic and large surveys must be specified well in advance of execution, and hence their numbers can be planned with some precision. But the number of special studies cannot be determined now because their orientation and number will depend on the priorities of GOR decision makers. Some studies will require more resources and time than others.

While quantifying project achievements would be difficult, there will be indicators of project success. For example, an indicator of policy makers' increased demand for information and analysis would be their demand for analysis in excess of project resources. Indicators of the project successfully promoting improved policy formulation would include the GOR's introducing more market-oriented pricing and technologies that are more relevant to farmers (i.e. that they are adopting), and improved incentives for rural enterprises. Indicators of the project successfully promoting collaboration among GOR agencies would include agencies sharing survey samples, using similar survey methodologies, piggybacking on questionnaires and enumerator training, and sharing of data bases.

An illustrative list of policy-oriented studies is included in the "Economic Analysis" (Annex E.4). A few of the high priority policy areas that are likely to be examined include:

Pricing Policy -- the economic effects of pricing policy decisions on production, export (especially of coffee), import, and use or consumption of various agricultural crops and inputs, including the effects of foreign exchange rate policies;

Marketing Policy -- the effects of public sector marketing activities on production and consumption and how to improve the efficiency of the entire agricultural marketing system;

Small Farm Production Systems, Water Management, Land Use -- in order to assist the small-scale farmer increase production, study is needed of small farm production systems (including input availability and credit), of land tenure and other land/water use issues, and of the constraints faced by farmers; and

Cross-border Trade in Agricultural Commodities -- the nature, magnitude, and impact on agricultural production and marketing of cross-border trade should be examined in order to better understand its costs and benefits and to help determine if its support is warranted.

2.7. Project Elements

2.7.1. Activities of the Agricultural Surveys and Statistics Service, MINAGRI

The major thrust of the project will be continued AID assistance to the Agricultural Surveys and Statistics Service of MINAGRI. Activities will include: special studies on priority concerns, periodic agricultural surveys, a National Agricultural Survey, and a variety of training.

The special studies will address a wide range of concerns of importance to MINAGRI and other GOR decision makers in the agricultural sector. Some will focus on specific policy issues and others on project design (e.g. analysis of potential socio-economic impacts) and implementation. Still others could focus on management concerns of the Ministry, such as how to improve donor coordination in the agricultural sector and how to better manage recurrent costs for projects.

These studies can be proposed by SESA personnel, other GOR personnel or donors interested in Rwanda's agricultural sector, but they must be presented and approved in the context of an annual work plan (discussed below).

Another important project activity will be SESA's agricultural surveys. These include:

- continuing data collection on land use;
- consumption and production surveys needed to maintain and update the integrated data base;
- early warning surveys and crop forecasting;
- selected pilot surveys on yields and on soil fertility/erosion;
- continuing agricultural price surveys at the farm level and estimates of marketed production;
- continuing reporting on livestock;
- assistance to other sections of MINAGRI in assessing impact of projects and extension themes; and
- a second National Agricultural Survey.

SESA has already gained considerable experience in these types of surveys during the predecessor project. In this project some new methodologies will be tested with the objective of reducing costs and improving survey efficiency and accuracy of results. For example, remote sensing will be tested for crop forecasting. As an alternative to the list sample frame, an area frame will be tested on a pilot basis for the National Agricultural Survey. New aerial photography and mosaics will be produced under the project (the most recent ones were produced in 1978 and are now out of date) and used to develop the area frame and to assist with many of the other activities listed above. New methods will be tested for using farmer recall to estimate production. Rather than reject "traditional" MINAGRI data collection methods (e.g. agronomes' estimates of crop production based on observation), the project will try to upgrade these methods as a more cost effective alternative than periodic data collection in all communes.

For both the policy studies and survey activities, ASPAP will help SESA to publish results in timely, easy-to-understand, and well distributed publications. Also, the project will support in-country seminars to provide organized opportunities for SESA, in collaboration with other GOR agencies participating in the project, to disseminate research findings and facilitate dialogue with policy makers. These seminars will be organized with the the assistance of project-funded technical advisors, and they will be held jointly with other GOR agencies participating in the project. GOR agencies

not directly involved in ASPAP and other donors interested in the survey/analysis activities concerning Rwanda's rural economy, or in research more generally, will be invited to attend. Depending on the topics covered, they will also be invited to present their research. These seminars will be held to present a study or survey report once it is prepared. Others will be held to discuss particular methodological or policy issues. Participants in the seminars, particularly GOR policy makers, will have the opportunity to comment on the findings and to indicate how they could be made more useful in the future. Hence, these seminars will offer a good opportunity to strengthen the dialogue between researchers and policy makers. These seminars will also permit agencies concerned with Rwanda's rural development to be informed about conditions in the rural economy and about who is undertaking what research activities.

Besides its own research activities for MINAGRI, SESA will continue to provide consulting services to other GOR ministries and donors for their survey work. Examples of this are past assistance to the National Population Office (ONAPO) in undertaking demographic and fertility surveys and to the World Bank and French for various agricultural surveys. SESA would continue to charge fees for these services to help reduce its recurrent cost burden. (As long as SESA remains semi-autonomous it can retain these fees to program as it chooses. However, if it were to eventually lose this status, these fees would revert to the central GOR budget.)

Since SESA's data collection and computer data entry units are already fairly well established, AID-furnished technical assistance will be devoted more to the analysis unit. Long-term analytical support to SESA (totalling about 8 person-years) will include: agricultural economist, computer specialist, and social scientist (skilled in relating micro-level data to policy issues). Long-term survey data collection support to SESA (totalling about 2 person-years) will be provided by a survey specialist/statistician when additional large-scale surveys will be planned and undertaken.

The long-term agricultural economist will be the team leader for the project's technical assistance team. This economist will be the first advisor to arrive, and one of his/her first tasks will be to work with the directors of all three survey units participating in the project to elicit from policy makers their informational needs for policy making and planning for the rural economy. This advisor will work with Interministerial Coordination Committee for Rural Development to develop strategy guidelines for a multi-year program of data collection and policy analysis. (See Annex I for the terms of reference for the team leader.)

The project will also furnish short-term technical assistance (up to 16 person-months over the life of the project) to assist with survey design and analysis. Some of this short term assistance can be specified at the beginning of project implementation (e.g. for testing new survey methodologies), but much of it will be left unspecified so that it can be programmed for specialized studies in response to emerging needs through the annual work plans.

A critical element in the job description of all technical advisors, both long and short-term, will be provision of on-the-job training to Rwandan personnel. All long-term advisors will have counterparts who will assume responsibility for project activities. Commitment to on-the-job training will be an important criterion in the evaluation of proposals for awarding the principal contract for the project (see "Implementation Plan," section 4).

Other training inputs include long-term international (4 Masters degrees in agricultural economics, statistics, and computer science) for each of the counterparts and short-term international (up to 12 person-months over the life of project). Examples of short courses include: Basic Agricultural Statistics and Methods (at USDA), Establishing Data Bases and Analytical Systems for Decision Making in Agriculture (at USDA), and Remote Sensing (at the Regional Centre for Services in Surveying and Mapping, in Nairobi). Also important will be short-term training in management and accounting. If there is enough interest among SESA and other GOR personnel, one or more of these courses will be offered in Rwanda. In addition, in-country training will be held on such topics as: survey methods, computer analysis, and agricultural policy analysis. For the latter, consideration will be given to buying into the resources of S&T's Agricultural Policy Analysis Project.

Since AID provided a considerable amount of computer equipment and software to SESA under the predecessor project, less will be needed under ASPAP. Other commodities that will be provided under the project include: furniture and appliances for technical advisors, 8 new vehicles, 20 motorcycles, equipment for surveys, and office furniture, equipment, and supplies.

In addition, the project will finance a small amount of construction (approximately \$90 thousand; see "Engineering Analysis" in Annex E.5) to expand SESA's office building. This will be an extension of the existing building, and will include office space for the technical advisors and their counterparts. It will also include a multiple purpose room for questionnaire review and coding, staff meetings, and training.

Other AID inputs include a limited amount of funding for local cost expenditures (e.g. publications and fuel, maintenance of computers and vehicles). However, this category of expenditure will be funded by AID at a much lower level than in the predecessor project, and AID's contribution to this will be phased out over the life of the project.

Government of Rwanda inputs to project activities at SESA include provision of all Rwandan personnel, including professionals, survey and support staff, office space and equipment, and office utilities. Further, the GOR will provide an increasing amount of local costs (for fuel, vehicle and computer maintenance, publications, local travel, etc.). SESA will help meet these costs by selling its publications and providing consulting services to other GOR agencies.

SESA's survey and analysis activities, use of technical assistance, training and seminars, and local currency expenditures will be programmed based on its preparation of annual work plans. These work plans will then be reviewed with other agencies participating in the project and approved by the C1C for Rural Development (see Section 2.7.5 below).

2.7.2. Support to Ministry of Plan

ASPAP activities in MINIPLAN will focus on the Direction des Enquetes (Surveys Unit) of the Direction Generale des Statistiques. Through assistance in organization, planning, and training of personnel, the project will enable the Direction to better carry out its program of socio-economic surveys and respond to policy makers' demands for information.

Activities of the Direction that the project will support include:

- analysis of data from the National Household Budget and Consumption Survey and integration of the data set with the National Agricultural Survey;
- surveys on enterprises;
- surveys on the informal nonagricultural sector;
- surveys on employment.

Inputs provided by AID for the Direction des Enquetes include long-term technical assistance (an economist for about 3 years to assist with planning, organization, and data analysis; probably to be shared with MINIFINECO) and short-term technical assistance (up to 12 person-months of services from economists, statisticians, computer specialists to assist with the studies listed above and others to be defined later). AID will also provide long-term training for counterparts (two masters degrees in economics and data processing); up to 15 person-months of short-term international training in research methods, policy analysis, and management; and in-country training -- on-the-job and workshops.

In collaboration with the other agencies participating in the project, ASPAP will support in-country seminars for MINIPLAN to present organized opportunities for presenting research findings to policy makers and others, and to get feedback so that the research is made more useful.

In addition, AID will supply the following commodities: four vehicles (passenger and 4-wheel drive) to facilitate field work, several micro computers with peripherals, computer software, and an office photocopier. Further, AID will provide for a limited amount of local cost support (e.g. fuel, publications, maintenance of vehicles and computers) to decrease over the life of the project.

MINIPLAN will provide a number of inputs for the project, including Rwandan professional and support personnel (e.g. counterparts for the long term advisor, enumerators, data entry staff), a limited amount of computer hardware and software, and office space. In addition, MINIPLAN will provide for an increasing amount of local cost support over the life of the project.

Programming of survey and analysis activities, international and in-country training, seminars, use of technical assistance, and local currency expenditures will be based on the Survey Unit's preparation of annual work plans, which will then be reviewed with other agencies participating in the project and approved by the CIC for Rural Development.

2.7.3. Support to Ministry of Finance and Economy

ASPAP activities in MINIFINECO (focused on the Department of Sectoral Policy within the Direction Generale of Economic Policy) will focus on assisting a number of key policy studies. It will also assist the ministry in refining its macro input-output model of the economy, which is used for projecting financing needs for the GOR budget as well as forecasting the economic impact of changes in important variables such as a hypothetical devaluation of the Rwandan franc. Examples of priority studies related to the rural economy which the project will assist are:

- the impact on the Rwandan economy of the variable U.S. dollar/Rwandan franc exchange rate; and
- the impact on the Rwandan economy of variable world market conditions for coffee.

Other studies will be determined as the project progresses.

AID inputs for this activity include provision of a long-term advisor in economics (approximately 3 years) probably to be shared with MINIPLAN to help in sectoral policy analysis, and short-term advisors (up to 12 person-months over the life of project). Project-financed commodities will include two 4-wheel drive vehicles for field work and a limited amount of computer hardware and software. In addition to on-the-job training, AID will finance two Masters degrees for counterparts in economics and up to 20 person-months of short-term training in statistics and policy analysis. Further, the project will fund in-country workshops to train personnel and seminars, as for SESA and MINIPLAN, to promote dialogue between researchers and policy makers..

MINIFINECO inputs for the project will include provision of professional and support staff, office space, utilities, and other local cost items (e.g. transportation for advisors, publications).

Programming of survey and analysis activities, training and use of technical assistance, seminars, and local currency expenditures will be based on annual work plans prepared by the Sectoral Policy Department, which will then be reviewed with other agencies participating in the project.

2.7.4. Summary of Planned Long-Term Technical Assistance

The schedule for ASPAP-funded long-term technical assistance is as follows:

MINAGRI	- agricultural economist	project years	2-5
	- computer specialist		3-4
	- social scientist		3-4
	- survey specialist/statistician		3-4
MINIPLAN	- economist		2-4
MINIFINECO	- economist		2-4

2.7.5. Collaboration Among Participating Agencies

In order to promote efficient use of project resources and to make project activities more relevant to GOR policy making for the agricultural sector, the project will emphasize collaboration among agencies participating in the project at the technical level. Further, it will strengthen linkages between the technical level and policy makers by directly involving the CIC for Rural Development in the project.

At the technical level a working group will be formed of representatives of each of the GOR agencies participating in the project. Members of this Project Technical Group (PTG) will include representatives from the three ministries (probably the directors of the statistics and survey units directly supported by the project) and the team leader of the technical assistance team. Members of the group will be free to invite others interested in project activities to attend the meetings. Likely invitees, for example, would be representatives from ISAR and ONAPO.

The PTG will meet quarterly or more frequently as needed to permit members to discuss project and other research activities, examine methodological issues, review research findings and forward them to policy makers, and consider future research activities. They will also program jointly project resources for common needs, such as training workshops (e.g. computer analysis techniques) and seminars to present research results. The PTG will also assure that studies and surveys will be conducted in conformity to the strategy guidelines to be developed by the CIC for Rural Development.

Shortly after the team leader arrives, s/he will work with the PTG and CIC for Rural Development to elaborate the strategy guidelines for review and approval by the CIC. This strategy will elaborate the CIC's priorities for informational needs on the rural economy, and will provide the framework for annual planning of project activities.

Although each agency will first draft its own annual project work plan, the PTG will be responsible for reviewing these plans and preparing from them a single project annual work plan. This will help to avoid duplication of activities, remove potential conflicts, and economize on use of project resources.

After preparing the project annual work plan, the PTG will submit it to the technical level of the Interministerial Coordination Committee for Rural Development (which is chaired by the Secretary General of MINAGRI) and AID for review and approval. This approval will be required for all project activities, including training, surveys, and local cost budgeting to go forward.

3. COST ESTIMATE AND FINANCIAL PLAN

The Agricultural Surveys and Policy Analysis Project involves an AID contribution of \$7 million and a GOR contribution of \$3.1 million. The GOR contribution comprises about 30% of total project costs.

AID grant funds will finance approximately 16 person-years of long-term technical assistance at an estimated cost of \$2.1 million. Almost two thirds of this will be allocated to SESA, with the balance evenly distributed between MINIPLAN and MINIFINECO. Also, approximately 40 person-months of short-term technical assistance, with an estimated cost of \$640 thousand in AID funding will be about evenly distributed between SESA, MINIPLAN, and MINIFINECO.

An additional \$96 thousand in consultancies is budgeted for mid-term and final evaluations and financial audit, and \$100 thousand is budgeted for a half-time PSC to assist the OAR with project management.

A small amount of construction, estimated at \$90 thousand from AID funds, is planned for an extension of the SESA office building.

About \$1.2 million in AID funds has been budgeted for commodity procurement and technical assistance housing/appliances. The former, which totals approximately \$758 thousand, includes primarily vehicles, computer hardware and software, aerial photography, and survey equipment. Procurement of aerial photography and survey equipment will be included in the institutional contract for technical assistance (see Implementation Plan, Section 4). Housing/appliances, which totals about \$459 thousand, includes housing rental, maintenance, furniture and appliances for technical assistance.

AID will also provide about \$869 thousand for training (to be included in the institutional contract for technical assistance). This includes \$416 thousand for long-term training (\$208 thousand for four Master's degrees for MINAGRI and \$208 thousand for two Master's degrees each for MINIPLAN and MINIFINECO). \$261 thousand is budgeted for international short-term training, and \$192 thousand for in-country training, seminars and workshops.

Further, AID will fund some local costs, totalling about \$733 thousand, for the three participating GOR agencies. While in the Phase I project AID provided advances for these costs, in ASPAP reimbursement will be employed. Participating ministries will pay for all local costs and will then submit documentation to OAR supporting these expenses to be reimbursed for the amount of AID's contribution. For MINAGRI and MINIPLAN, the AID contribution for these costs will be phased out over the life of the project (100% for year 1, 80% for year 2, 60% for year 3, etc.; however, only MINAGRI will receive such support in the first year since it will be continuing activities from Phase I). The contribution for

MINIFINECO local costs will remain constant but much lower than for the other agencies. These local costs, which are detailed in Annex F, include fuel and vehicle maintenance, computer maintenance, personnel-related costs (for in-country training and salary supplements), and printing costs.

Lastly, \$1.17 million of the AID contribution is budgeted for inflation (5% compounded annually) and contingency (5% annually).

The GOR contribution includes about \$1.1 million equivalent for personnel, including professionals, field staff (enumerators and controllers/supervisors), and other staff (e.g. key punchers, secretaries, guards, and drivers). An in-kind contribution of \$114 thousand equivalent (included as part of "Local Costs") is included for the rental value of GOR office space. \$854 thousand equivalent is budgeted for other local costs, covering the same items as supported by AID. However, the contributions of MINAGRI and MINIPLAN will increase over the life of the project in inverse proportion to the AID contribution. It is anticipated that some of the printing costs, which constitute a sizeable part of total local costs, will be offset by the GOR agencies selling their publications.

The balance of the GOR contribution, about \$1.0 million equivalent, is for inflation (10% compounded annually) and contingency (10% annually).

TABLE 1
SUMMARY COST ESTIMATE AND FINANCIAL PLAN
(\$ thousands or equivalent)

	<u>AID</u> (<u>\$</u>)	<u>GOR</u> (<u>FRW</u>)	<u>TOTAL</u>
1. Technical Assistance/Personnel			
A. Long-term - MINAGRI	1,300	636	1,936
MINIPLAN	390	300	690
MINIFINECO	390	148	538
B. Short-term - MINAGRI	256		256
MINIPLAN	192		192
MINIFINECO	192		192
Total	2,720	1,084	3,804
2. Evaluation & OAR Management			
A. Evaluation	96		96
B. Project Manager	100	-	100
Total	196		196
3. Commodities + Housing			
MINAGRI - commodities	545		545
housing	251		251
MINIPLAN - commodities	133		133
housing	104	-	104
MINIFINECO - commodities	80		80
housing	104		104
Total	1,217		1,217
4. Construction (MINAGRI)	90		90
5. Training			
A. Int'l long-term - MINAGRI	208		208
MINIPLAN	104		104
MINIFINECO	104		104
B. Int'l short-term - MINAGRI	68		68
MINIPLAN	85		85
MINIFINECO	108		108
C. In-country - MINAGRI	64		64
MINIPLAN	64		64
MINIFINECO	64		64
Total	869		869
6. Local Costs - MINAGRI	493	448	941
MINIPLAN	196	232	428
MINIFINECO	44	288	332
Total	733	968	1,701
Total 1 - 6	5,825	2,052	7,877
Inflation	880	842	1,723
Contingency	295	206	500
GRAND TOTAL	7,000	3,100	10,100

TABLE 2

PROJECTION OF EXPENDITURES BY FISCAL YEAR
(\$ thousands or equivalent)

	<u>FY 87</u>	<u>FY 88</u>	<u>FY 89</u>	<u>FY 90</u>	<u>FY 91</u>	<u>Total</u>
<u>AID</u>						
Technical Assistance		550	940	940	290	2,720
Evaluation & OAR Mgt.	20	68	20	20	68	196
Commodities + housing	354	541	222	75	25	1,217
Construction	90					90
Training	225	317	109	109	109	869
Local Costs	99	247	188	129	70	733
Total	788	1,723	1,479	1,273	562	5,825
Inflation	39	177	234	275	155	880
Contingency	39	86	74	64	32	295
Grand Total	866	1,986	1,787	1,612	749	7,000
<u>GOR</u>						
Personnel	72	253	253	253	253	1,084
Local Costs	6	152	211	270	329	968
Total	78	405	464	523	582	2,052
Inflation	8	85	153	241	355	842
Contingency	3	41	46	52	59	206
Grand Total	94	531	663	816	996	3,100
	<u>FY 86</u>	<u>FY 87</u>	<u>FY 88</u>	<u>FY 89-91</u>		
Planned AID Obligations	1,500	1,500	1,500	2,500		

TABLE 3
METHODS OF IMPLEMENTATION AND FINANCING

<u>Type of Assistance and Method of Implementation</u>	<u>Method of Payment</u>	<u>Amount (\$ thousands)</u>
<u>Technical Assistance</u>		
PIO/T - Direct AID Contract Institutional Contract	LOC-TFCS/Direct Pay	4,750
of which: TA		(3,350)
Training		(1,025)
Commods./Aerial photo.		(375)
<u>Evaluation/Financial Services & OAR Mgt.</u>		
PIO/Ts - Direct AID Contracts	Direct Pay	250
<u>Commodities</u>		
<u>PIO/Cs</u>		
AID Procurement - Direct	Direct Pay	805
PSA	"	60
<u>PIL</u>		
GOR Procurement - HCC	Direct L/Com	135
<u>Construction</u>		
<u>PIL</u>		
Host Country Contract	Direct Reimbursement	100
<u>Local Costs</u>		
<u>PILs</u>		
Reimbursement	Direct Reimbursement	900
Total Project		<u>7,000</u>

4. IMPLEMENTATION PLAN

4.1. Implementation Responsibilities

Three sets of actors will be involved in implementing ASPAP. Government of Rwanda agencies participating in the project will hold overall responsibility for implementation. These agencies will be assisted by a Procurement Services Agent and institutional contractor, which will help with commodity procurement, provide technical advisors, and organize international and in-country training. AID and the GOR will provide funding for the project. AID will also assist with procurement of technical assistance and commodities, and it will monitor project activities to help assure that they stay on track.

4.1.1. GOR's Role

GOR participating agencies responsible for implementing the project are: MINAGRI, especially its Agricultural Surveys and Statistics Service, the Direction Generale of Statistics of MINIPLAN, and the Direction Generale of Economic Policy of MINIFINECO. However, the Interministerial Coordination Committee for Rural Development will oversee the project, and its president will be the principal representative of the GOR for approving implementation actions.

Generally, each agency will have considerable autonomy in implementing its project-supported activities, just as each has independently determined its project activities and its contribution to the project during the design. Each agency will be responsible for defining and carrying out survey and other research activities contributing to the achievement of project objectives, and for publishing and disseminating results, including organizing seminars. Each agency will individually program its activities through preparation of annual work plans, including local cost budgets. (For the first year of the project, only SESA's annual work plan will include programming of local currency, since only it among the participating agencies has activities continuing from the first phase.) Further, each will be responsible for providing qualified professional and support staff, participants for training, and office/administrative support. In addition, each will take responsibility for supervising its project-funded technical advisors. Moreover, each will control its own local cost budget, local and shelf item commodity procurement, inventory records, and use of and maintenance of commodities.

Collaboration among participating GOR agencies in project implementation is necessary, however, in order to make the project manageable, to encourage efficient use of resources, and to promote overall objectives. Therefore, participating agencies will work together in the Project Technical Group, and at a higher level in the CIC for Rural Development. Implementation documents, such as PILs for approving the joint annual project work plans and the PIO/T for the technical assistance contract, will be signed by the president of this CIC.

4.1.2. Contractors' Role

Contractors will assist GOR agencies to implement the project. As described in section 4.2. below, a Procurement Services Agent (PSA) will help with initial commodity procurement in the U.S., and an institutional contractor will assist with other procurement. This institutional contractor will also be responsible for provision of all technical assistance and organizing in-country and international training.

4.1.3. AID's Role

AID's role in ASPAP will be provision of support to implementing agencies and monitoring. In order that project collaboration among agencies be smooth, AID will negotiate direct contracts with an institutional contractor for technical services and PSA for commodity procurement. OAR/Rwanda will be responsible for initial procurement of commodities that involve a one-time order such as vehicles and household furniture/appliances, and will contract for evaluations and audits.

AID will advise the GOR on project implementation and it will assist in solving problems. Also, AID will approve the strategy guidelines for data collection and analysis and the project annual work plans. Dialogue on implementation matters, work plans, as well as on priorities for studies is critical and will be regularly maintained.

Project management responsibilities within the OAR will be the same as for the Phase I project -- the Agricultural Development/Private Enterprise Officer (ADO) will serve as Project Officer and will be backed up primarily by the Project Development Officer. For day-to-day management of the project, the ADO will be assisted by a half-time, locally-recruited and project-funded Personal Services Contractor. The Project Officer will also be supported by several other OAR/Rwanda staff, including the Program Officer, Social Science Advisor, Engineer, Training Officer, Controller, and Management Officer and accounting/commodity procurement personnel. Since ASPAP is the second phase of an on-going project, it will not greatly add to the mission's management burden.

As for other projects, considerable assistance will be provided by REDSO/ESA in accordance with AID Delegations of Authority. OAR plans to particularly make use of REDSO economists' inputs, such as in reviewing project-supported studies and reviewing priorities.

4.2. Procurement of Technical Services

In order to promote coordination among project activities and simplify administration, technical assistance to GOR agencies will be provided through just one institutional contract. Since the contractor will be called on to provide a wide range of technical advisors and other services in support of a high priority and potentially sensitive area for the GOR, the mission

recommends that the contract be openly competed in the U.S. The mission does not think that there is sufficient justification to set aside the contract for universities since long-term institutional linkages between the GOR and a university are not sought under the project. An 8(a) set-aside is also not recommended since it cannot be demonstrated that 8(a) firms have the necessary resources to draw on to fill all of the required long and short-term positions in a timely manner. However, to the extent practicable AID would urge organizations wishing to bid on the contract to utilize Gray Amendment entities in subcontracting, such as for international training and U.S. commodity procurement.

Given the desire to be responsive to the needs of several GOR agencies and the lack of one central GOR ministry that will be involved with implementing the technical assistance institutional contract, direct AID contracting will be employed in conformance with AID Handbook 14 and Federal Acquisition Regulations. However, GOR participating agencies will share with AID the responsibility to review proposals and select the institutional contractor. The Request for Proposals and contract will be prepared/negotiated by the REDSO Regional Contracting Officer in collaboration with OAR and the GOR.

Selection of the contractor will be based on a wide range of criteria. Most important among these are:

- technical responsiveness of the proposal -- e.g. experience in and understanding of methods for carrying out agricultural surveys and other studies on the national and local levels; plans for testing survey methodologies (including the area sampling frame); provisions for on-the-job and other in-country training for Rwandan staff; approaches to data analysis and publications; appreciation for the Rwanda project environment;
- institutional capabilities -- e.g. to field and support qualified long and short-term personnel in a flexible and timely manner in response to GOR needs; to procure commodities; to carry out or supervise production of aerial photography and production of mosaics; knowledge of and experience working with AID regulations; contacts with relevant U.S. and international research organizations;
- quality of personnel proposed -- e.g. appropriate technical backgrounds; experience in developing countries; ability to provide effective on-the-job training; French language skills.

It is possible that no single U.S. institution can adequately possess all of the desired characteristics; therefore some proposals will likely be offered by consortia of institutions, perhaps including universities and private firms. It is also possible that some proposals will include arrangements with governmental organizations with well-established capabilities in some areas of the project, e.g. USDA, U.S. Bureau of the Census, or the Remote Sensing Facility in Nairobi (a public international organization which is supported by several East African nations as well as by

various donors, including AID). The GOR and OAR look forward to reviewing a wide range of proposals.

However, if in reviewing proposals the GOR and OAR determine that none of the offerors are fully responsive to the terms of reference as stated in the Request for Proposal, the OAR reserves the right to set aside some of the work for a U.S. government agency under a PASA. This possibility will be stated in the synopsis for the Commerce Business Daily and in the RFP.

Since this project will focus on surveys and studies whose nature, timing and quantity will depend largely on evolving GOR needs, and since much emphasis will be placed on on-the-job training, incentive contracting (which tends to emphasize quantities of outputs) for this institutional contract is not appropriate.

For procurement of commodities in the U.S. at the beginning of the project (in anticipation of the arrival of the technical assistance), the mission recommends that one of the 8(a) procurement services agents currently under IQC in the U.S. be engaged. This is discussed in section 4.3 below.

4.3. Procurement of Commodities

Depending on the category of commodities, different entities will be responsible for procurement under the project. In anticipation of the arrival of technical assistance under the institutional contract, OAR/Rwanda will enlist the services of one of the 8(a) PSA firms currently under IQC with AID/W to procure household appliances in the U.S. Once the commodity list has been prepared, a worksheet PIO/C will be transmitted to M/SER/OP requesting that the procurement services be negotiated with an 8(a) firm under an IQC. Using a PSA for this can cut down on costs and administration, and OAR has had good experience with 8(a) firms for this type of procurement. In order to reduce costs and acquisition time for furniture for the TA, OAR will procure all furniture from Kenya. In addition OAR will procure project vehicles.

GOR agencies will be responsible for local and shelf item procurement of commodities using funds budgeted under local costs. This procurement will be governed by AID Handbook 1, Supplement B regulations. Commodities included in this category are primarily office supplies, furniture and equipment, as well as fuel. GOR agencies will also be responsible for procuring computer maintenance services and for maintenance of other project-funded commodities (including vehicles and motorcycles). OAR will be responsible for renting and maintaining housing for the TA (budgeted under project support costs; see Annex F).

Remaining commodities (i.e. computer software, survey-related equipment, and aerial photography/mosaics) will be procured by the TA contractor, and financing for such procurement will be included in the value of the prime contract. This will promote coordination of procurement for different GOR agencies, assure the most appropriate selection of commodities at the appropriate time (since the technical assistance contractor will necessarily

have expertise in this matter and can phase procurement with evolving project needs), and ease administration for OAR.

The GOR will directly procure locally computer hardware. Procurement will be initiated by the preparation of a PIL which earmarks funds and sets forth the eligible commodities. Payment to the supplier will be by AID Direct Letter of Commitment. It is anticipated that a source/origin waiver and authorization to negotiate with a single source, the local IBM dealer, will be required once exact needs have been determined.

The authorized source/origin of procurement for this project is Rwanda and countries included in AID Geographic Code 941. Annex H of the Project Paper contains a waiver from Geographic Code 000 to Geographic Code 935 (Special Free World) and a waiver of Section 636 (i) of the Foreign Assistance Act for the purchase of project vehicles and motorcycles.

An illustrative list of commodities to be procured is included as Annex G. It contains a breakdown by category of goods, recipient GOR agency, and estimated costs. Cost estimates take into consideration delivery costs and PSA fees.

For procurement to be done by the PSA, OAR/Rwanda will provide fiscal data to M/SER/OP as PIO/Cs are transmitted. Payments to the PSA and selected suppliers will be made by AID/W. OAR/Rwanda will make direct payment to suppliers for commodities it procures without the PSA.

For their respective procurements, OAR, the PSA and the institutional contractor will assure that all shipping, insuring and marking of commodities will be in compliance of AID regulations.

OAR will be responsible for clearing all goods from customs. OAR procurement personnel will be responsible for the inspection of commodity arrivals and for the preparation of receiving reports and inventories. GOR agencies and the institutional contractor will insure prompt and proper utilization of project-funded commodities and will maintain inventory records. The contractor will also be responsible for preparing and submitting to OAR/Rwanda annual commodity utilization reports.

4.4. Provision of Training

Arrangements for training under this project are based on an assessment of the amount and types of training provided in the predecessor project and on discussions held with officials of GOR agencies participating in ASPAP. They also take into account OAR/Rwanda's experience with long-term training in other projects, which has often been problematic.

The project will provide for various types of training: on-the-job with technical advisors, other in-country (short courses, workshops, and seminars), and overseas (long and short-term).

On-the-job training will be heavily emphasized in ASPAP. All technical advisors will have at least one Rwandan counterpart who will benefit from skills transfer. The strength of technical advisors as teachers will be an important criterion for selection of the institutional contractor, and if need be, timeliness of research publications will be sacrificed for better transfer of skills.

The project will provide long-term training (at the Masters degree level) to 8 participants in such fields as agricultural economics, statistics, data processing and analysis, and policy analysis. Other fields of training identified by the GOR will also be considered. In addition, the project will finance short-term international training in a variety of topics, such as those listed above, remote sensing, and crop forecasting, and management.

Further, there will be short-term in-country training for survey supervisors, verifiers and enumerators as well as seminars and workshops on such topics as data processing and analysis.

GOR agencies participating in the training will have the responsibility of assuring the availability of qualified participants. This should be done as soon as possible to ensure that there is enough leadtime to prepare participants for training out of the country, including provision of English language training at the English Training Center of USIS. It is also essential that this training be properly phased so that participant trainees receive on-the-job training as counterparts of technical advisors.

Each year the participating GOR agencies will be responsible for identifying candidates for all types of training in their annual project work plan. The institutional contractor will be responsible for making the necessary arrangements for both long-term and short-term international training. The institutional contractor will also be responsible for conducting in-country training and for assisting GOR agencies in organizing seminars to discuss research findings, policy and methodological issues with policy makers and other agencies and donors. To organize these workshops and seminars, the contractor will draw on its long and short-term personnel, depending on what is called for in the annual work plans.

In other projects OAR and the GOR have experienced difficulties in identifying enough suitable candidates to participate in budgeted international long-term training. In order to minimize these problems in ASPAP, there will be insistence on careful planning of training in the annual work planning exercise. If certain key individuals identified for long-term training cannot be made available for two continuous years overseas, the project will consider providing training in a few shorter periods with time in-between being spent on the job in Rwanda.

Further, the Project Agreement will contain a covenant that the GOR will nominate all persons for long-term training in the first Project Annual Work Plan and that funds planned for long-term training will not be used for other project activities.

4.5. Procurement of Construction Services

For the extension of the SESA office building, construction drawings and documents will be prepared by the engineering and architecture office of MINAGRI. OAR/Rwanda, with REDSO engineering assistance will approve all plans, specifications, tender documents, and cost estimates prepared by MINAGRI.

GOR and AID host country contracting procedures will be used to advertise, evaluate and award a contract to build the extension. Because of its simplicity and size, this building expansion will be readily built by using the capabilities of local contractors. OAR/Rwanda and the GOR, including MINAGRI, have had considerable experience with host country contracting for AID project construction, and OAR has found this experience to be favorable.

During the short construction period, approximately six months, MINAGRI and AID will jointly supervise the contractor's operation to insure compliance with plans and specifications. MINAGRI will prepare, based on this supervisory work, the progress payments due to the contractor. AID will approve the payment requests and pay directly to the contractor on behalf of the GOR. AID may consider use of the FAR method for this construction if this proves to be more advantageous and feasible. (Further details on this construction are included in Annex E.5, which was prepared by the OAR/Rwanda and REDSO/ESA engineers.)

4.6. Schedule of Major Implementation Events

<u>Event</u>	<u>Timing</u>	<u>Responsible Unit</u>
ProAg signed	8/86	GOR, OAR
Project Technical Group meets	9/86	GOR
PIO/Cs drafted	9/86	OAR
Initial CPs (signatures, construction)	10/86	GOR
PIO/Cs issued	10/86	OAR
PIO/T for instit. contractor drafted	10/86	GOR, OAR, REDSO
First annual work plan prepared*	11/86	GOR
Work plan, PIO/T approved by CIC, AID	12/86	GOR, OAR
PIO/T signed, RFP issued	12/86	GOR, OAR, REDSO
Project-supported studies underway	1/87	GOR
Begin construction	1/87	GOR
Proposals for instit. contr. reviewed	7/87	GOR, OAR
Vehicles, furniture/appl. arrive	7/87	PSA, OAR
First participants begin at ETC	7/87	OAR
First research seminar held	7/87	GOR
Complete construction	7/87	GOR
Contract for instit. contr. signed	10/87	OAR, REDSO
Chief of Party arrives	11/87	Contractor
MINIPLAN, MINIFINECO advisors arrive	12/87	Contractor
Aerial photography/mosaics started	1/88	GOR, Contractor
Second research seminar held by	1/88	GOR, Contractor
Long-term training begins	1/88	Contractor
Pilot area sample frame constructed	5/88	GOR, Contractor
Strategy Guidelines drafted	6/88	GOR, Contractor
Other MINAGRI advisors arrive	7/88	Contractor
Pilot National Ag. Survey completed	9/88	GOR, Contractor
Mid-term project evaluation	9/88	GOR, OAR
National Ag. Survey started	9/89	GOR
National Ag. Survey completed	8/90	GOR
Final project evaluation, PACD	6/91	GOR/OAR

*Recurrent annually thereafter

4.7. Monitoring Arrangements

The purpose of project monitoring is to help assure that project activities contribute to achieving project objectives.

GOR project monitoring will be done on a day-to-day basis by project directors in relevant agencies and by the Project Technical Group.

For the OAR, the Project Officer (ADO) will take the lead in project monitoring. He will be assisted by the Project Development Officer and other OAR personnel, and also by REDSO. The OAR will formally examine the status of project implementation in its semi-annual implementation reviews for the entire OAR project portfolio. In monitoring implementation, the Project Officer will attend meetings of the CIC for Rural Development that concern the project, and keep abreast of GOR compliance with project conditions precedent and covenants, and performance of GOR agencies and of the contractor. In addition, the Project Officer, as part of his ongoing responsibilities as ADO, will inform himself of developments in the agricultural sector, including those on the policy front. This will help the OAR gauge the project's progress in meeting its objectives. Using the annual work plans as a reference, the GOR and OAR will be aided in project monitoring by the contractor's quarterly submission of reports and by the Project Technical Group's preparing minutes or "comptes rendus" of its meetings.

Further, there will be annual project reviews when heads of the GOR statistical services participating in ASPAP and the OAR project officer will formally review project implementation and recommend improvements for the future.

5. SUMMARIES OF ANALYSES

5.1. Institutional

The institutional organization of ASPAP plans for the division of responsibilities among participating agencies and for promotion of collaboration among them. Data on the rural economy, e.g. concerning agriculture (production and marketing), employment, and rural enterprises, to be collected and analyzed by MINAGRI, MINIPLAN, and MINIFINECO will constitute an integrated data base which decision makers may draw upon in formulating macro-economic policy. Each agency needs technical assistance to build up its analytical capability and physical capacity to improve data processing. The institutional arrangement recommended in this analysis promotes the development of the technical capacity of each agency to collect and analyze data on specific features of the rural economy, while at the same time institutionalizing their active collaboration. The Project Technical Group feeding into the CIC for Rural Development will be a mechanism through which survey activity is rendered complementary, technical assistance is shared, the results of studies and rural sector analyses are published and publicized, and policy makers are informed of the behavior of the rural sector.

Most of the support under ASPAP will be given to SESA to improve its data collection and analysis capability and strengthen its role in the MINAGRI's policy formulation process. SESA has been asked by the Minister of Agriculture to assume leadership in identifying agricultural needs and the programs to meet them, by region, assessing the adequacy of work plans to meet program goals, and evaluating the realization of planned activities. This is a major contribution to planning and policy formulation in MINAGRI and is an indication that SESA is already increasing its impact on the policy formulation process. Support to SESA will enable the unit to fulfill this mandate and consequently to improve the analytical base from which MINAGRI policy is made. As MINAGRI feeds policy directly into the CICs for Economic Policy and Rural Development, the improved ability of SESA will be a determinant of improved policy formulation at this higher level.

MINIPLAN's role in the GOR policy formulation process is more formally established through its responsibility for preparing the Five Year National Development Plan. Additional resources (both equipment and trained personnel) are necessary, though, in order for MINIPLAN to coordinate survey activity to ensure its relevance to the Plan. Strengthening MINIPLAN's analytical capability and capacity to do rural sector surveys and analysis of household budgets and consumption, off-farm employment opportunities, and rural enterprises will improve considerably the integrated data base on which rural economic policy will be built.

MINIFINECO chairs the CIC for Economic Policy and is a member of the CIC for Rural Development. The Ministry has been explicit about its need for information on the rural economy from other data collecting agencies to complement its own data collection efforts. The Ministry needs assistance largely in sectoral economics (e.g. agricultural economics) in order to relate survey analyses to economic policy and to identify gaps in the data collection

process which it will try to fill with surveys of its own. Special surveys of immediate and urgent concern to policy makers especially will be undertaken by MINIFINECO.

5.2. Technical

Valid and current data which describe the rural economy in terms of agricultural production and marketing, rural enterprises, and rural employment, will be collected and analyzed by this project as the fundamental means for improving the information base from which decision makers draw in formulating policy for the rural economy.

There are a considerable number of agricultural and socio-economic surveys which will be undertaken by ASPAP. They are meant to provide policy makers with information on the rural economy in the form of data and analyses. Some of these will be general insofar as they will be either periodic or broad in nature; others will be special, more narrowly focused and responsive to specific, perhaps immediate, needs for information. The surveys of the first type can be largely identified at this time. They include the local and national agricultural surveys for recording crop and livestock production, rainfall, progress in planting and harvesting, yield forecasts, and a variety of household level agricultural activities. Socio-economic surveys fitting into this category include the household budget and consumption surveys which identify expenditures and sales by item and member of the household as well as the consumption habits of families.

Some special surveys likewise can be cited at this time, although by their very nature others of this type will be identified only as the special circumstances develop which give rise to the need for them. Special agricultural surveys are planned to investigate the impact of pricing policies on the production of key cash/export crops, the use and planned use of wetlands and forests, and the pricing and marketing of major food crops. Special socio-economic surveys previewed at this time will focus on farm management, intra-household agro-economic behavior, and marketing. These and other surveys, such as off-farm employment and rural enterprise inventories, will help policy makers to see the micro-economic impact of macro policy decisions.

In the process of recording and analyzing information on the rural economy the project will attempt to refine the methodologies employed in survey activity in order to increase the confidence level of statistical statements and reduce recurrent costs. In particular the national agricultural survey will conduct a pilot survey in order to assess the performance of the area frame methodology according to the aforementioned criteria.

The project will be staffed by expatriate advisors, mostly economists and statisticians, and Rwandans furnished by the participating GOR agencies. Some of these participants will receive long-term training in the U.S. and will be expected to take the place of the expatriate advisors in the last years of project life. Other participants will receive short-term training in order to improve their technical skills. These training arrangements, including a special emphasis on on-the-job training, will help promote the Rwandan capability to sustain project activities over the long run.

The improved integrated data base from which analyses of the rural sector are made and subsequently furnished to policy makers will evolve out of the collaboration among the GOR agencies participating in the project: MINAGRI, MINIPLAN, and MINIFINECO. As each agency strives, within the terms of its mandate, to identify and describe the features of agricultural production, household agro-economic activity, employment, and rural enterprise development, an overall picture of the rural economy will emerge. The Project Technical Group, which will consist of representatives of each participating ministry, will be responsible both for streamlining the data collection process and forwarding analyses to policy makers. The Interministerial Coordinating Committees for Economic Policy and Rural Development thus will be informed accurately and in a timely manner of the socio-economic behavior of the rural sector, which will constitute an information base from which they may make informed policy decisions.

5.3. Social

The need for improved rural sector policy is evidenced by the increasing numbers of individuals who are no longer productively engaged in agriculture, cannot find productive employment elsewhere, and have few opportunities to undergo training in marketable skills development. Agricultural production on fragmented parcels composed of deteriorated soils will not be capable of meeting the demand of a growing market dependent population. Developing Rwanda's agricultural resource base will require research programs applied to the actual conditions under which farmers cultivate the land and policy reform which makes farming more profitable.

The processes by which ASPAP will promote agricultural development will entail the participation largely of Rwandans, assisted where needed by expatriate technical advisors. This means that within each participating agency there are Rwandans who will be assigned to the project as counterparts and technicians and who will be eligible for on-the-job and short and long-term training. In the design process, which itself consisted of regular dialogue with representatives of each participating service, host country commitments to providing personnel were solicited as GOR contributions to the project. More widespread participation at local levels will be a function of sample/sub-sample selection. Participating families will work closely with enumerators, learning to measure production and more generally to quantify their production systems. As a result increasingly they should be able to assess on their own the impact of policy reform and technological intervention upon their agricultural practices and economic status.

The feasibility of project activities has been promoted through collaboration in the design phase and, as revealed in the Institutional Analysis, assessments of the relative strengths and weaknesses of the participating agencies. Already excellent working relationships exist between OAR/R and the statistical service of each participating ministry. To further the goal of streamlining the GOR data collection and analysis process and of informing policy, a Project Technical Group will be created so that information on the expanded data base can be shared among those agencies responsible for providing input into the economic policy formulation process. The results of analyses will be reported in seminars and publications, offering policy makers clear opportunities to provide feedback to data collection services and indicating how reports can be made more useful to them in the future.

The beneficiaries of project activities will include those individuals reached directly by on-the-job and other training opportunities and more globally the individuals active in those sub-sectors of the rural economy most affected by policy reform. In the first instance we are speaking of counterparts and technicians who will be involved in data entry and processing, and statistical and economic analysis. Beneficiaries of the latter type are not easily identified at this time. It appears that some 15% of farm households are relatively more heavily involved in commercial transactions and contribute disproportionately to total agricultural production. The project, through its data collection and analysis activities, will measure the extent to which policy reform benefits some segments of the rural population more than others. Policy makers thus will be informed of the

tradeoffs they face in the decisions they make, clarifying whom the beneficiaries of policy reform are supposed to be. The identification of beneficiaries will be an evolving phenomenon.

The impact of project activities will be followed as the project monitors the effect of policy upon rural socio-economic activity, a necessary part of the overall process of data collection and analysis. Initial data collection efforts will characterize the rural economy and provide policy makers with the hard data they need to make sound policy decisions. Subsequent measurements of rural socio-economic activity will reveal the changes to which economic policy reform has contributed. SESA will need to become expert in this difficult but essential activity in order to demonstrate how policy affects the rural economy.

Currently numerous socio-economic survey activities are planned which will disaggregate rural economic activity by gender, region, level of education, age, a large number of production variables, and many other employment, economic and household variables. Analyses of the relationships between farm-level phenomena, on the one hand, and agricultural and economic policy, on the other, will be statements of social impact. In particular the ways in which members of the household are affected differentially by changes in the rural economy will be brought to light.

5.4. Economic

Since this is an institution-building project, a cost-benefit analysis is neither appropriate nor possible. Of primary concern is the effectiveness of planned project activities in achieving the desired activities and then, among project activities that are deemed effective, how to keep the cost as low as possible.

Cost-effectiveness considerations have dominated the planning of this Phase II project. In view of the large potential benefits to the entire Rwanda economy if the project is successful, the foremost concern has been to choose the combination of support activities that will most effectively and quickly achieve the project purpose of improving agricultural policy formulation and planning.

Even though the effectiveness of the effort is of primary interest, cost considerations have been a major concern in the project design. In order to promote cost-effectiveness, ASPAP is financing pilot efforts to test different sampling and data collection methodologies. The project is obtaining expert advice for the GOR on how to limit the number of larger, more costly surveys to the minimum required to establish baseline data, and how to make effective use of smaller, focussed surveys and traditional data collection activities to provide periodic updates.

In view of these efforts to assure effective implementation of the project while keeping costs as low as possible, the proposed design is the most cost-effective approach possible.

With respect to the recurrent cost burden on the GOR of project-supported data generation and analytical activities, a user fee system will be employed to spread some of the associated costs among the different agencies using them. GOR agencies involved in the project will charge for publications, a significant element of project local costs. There is no question, however, that the GOR will have to provide an increasing amount of budgetary resources for the agencies involved, particularly as the project comes to an end. Early in the project, the recurrent cost burden will not be especially heavy and probably will not require the ministries to make tough decisions between priorities. Late in the project, though, the recurrent cost burden will be significantly greater. It is hoped by that time the value to the GOR of the activities involved should be so apparent that the additional budgetary support required to sustain the activities should be considered high priority and well worth the cost. During the project design, the participating ministries have carefully considered their budgetary support requirements and have agreed to fund them in increasing amounts over the life of the project.

The beneficiaries of the project, if successful, will ultimately include the entire Rwandan population, who will participate in a more rapidly growing economy resulting from more effective investment decisions and more efficient resource allocations. Since this project can only inform policy makers and not itself bring about reform, the benefits will be indirect. Further, many of the benefits are likely to accrue after project completion. Nonetheless, without improved policies the Rwandan population will eventually suffer income and welfare loss.

To support a better informed policy making process, basic economic research on the food and agricultural systems needs to focus on three levels: microeconomic, macroeconomic, and micro-macro linkages. An exemplary list of the key areas of policy concern to be targetted for analysis by the project is included in Annex E.4. on Economic Analysis. At the same time, the project's flexibility in providing analysis in response to evolving needs of policy makers will help assure that analysis is indeed informing GOR policy making.

6. CONDITIONS PRECEDENT AND COVENANTS

6.1. Conditions Precedent

6.1.1. First Disbursement

Prior to the first disbursement under the Grant, or to the issuance by AID of documentation pursuant to which disbursement will be made, the Cooperating Country will, except as the Parties may otherwise agree in writing, furnish to AID in form and substance satisfactory to AID:

A statement of the name(s) of person(s) who will be acting on behalf of the Cooperating Country and of any additional representatives, together with a specimen signature of such persons.

6.1.2. Additional Disbursement

6.1.2.1. For Activities to be Conducted under Annual Work Plans

Prior to the disbursement of funds under the Grant, or to the issuance by AID of documentation pursuant to which disbursement will be made for local cost support for each of the Cooperating Country's Participating Agencies (as defined in the Amplified Project Description) for each year of the project, the Interministerial Coordination Committee for Rural Development and Health (CIC/RD) will furnish to AID, in form and substance satisfactory to AID, a Project Annual Work Plan.

6.1.2.2. For Construction

Prior to the disbursement of funds under the Grant, or to the issuance by AID of documentation pursuant to which disbursement will be made for construction, the Cooperating Country will, except as the Parties may otherwise agree in writing, furnish to AID, in form and substance satisfactory to AID:

1. Evidence that the Cooperating Country owns, has acquired title to, or has otherwise arranged for the long-term use of sufficient land for such construction and has taken the necessary steps to assure that adequate access and public utility services are available to the site(s);
2. Plans, specifications and bidding documents for such construction, and a contract for such construction prior to its execution with a contractor acceptable to AID; and
3. A contract or other satisfactory arrangement for engineering supervision services for such construction prior to its execution with a contractor acceptable to AID.

6.2. Covenants

6.2.1. Counterpart Personnel

The Cooperating Country agrees to promptly recruit and hire or reassign all Rwandan personnel necessary to implement the project in a timely manner. The Cooperating Country further agrees to name such personnel in the first Joint Annual Work Plan.

6.2.2. Participant Training

The Cooperating Country agrees to nominate all persons for long-term training in the first Project Annual Work Plan.

The Cooperating Country agrees to provide travel documents to persons nominated for long-term training in a timely manner.

The Cooperating Country will establish arrangements to assure that all personnel completing long-term training under the project will return to Rwanda to serve as employees of the respective Participating Agencies and that such personnel are promptly assigned to positions commensurate with the training and experience they have received under the project. The parties agree that funds allocated for long-term training will not be used for other project activities.

The Parties agree that funds allocated for long-term training will not be used for other project activities.

6.2.3. Evaluation

The Cooperating Country agrees to establish with AID an evaluation program as part of the project which will include: a) evaluation of progress toward attainment of the objectives of the project; b) identification and evaluation of problem areas or constraints which may inhibit such attainment; c) assessment of how project-generated information has been used in policy formulation; and d) evaluation, to the degree feasible, of the impact of the project on the rural economy.

6.2.4. Interministerial Coordination Committee for Rural Development and Health

The Cooperating Country will ensure that the CIC/RD develops strategy guidelines for a multi-year program of data collection and policy analysis on the rural economy and takes steps to assure that Project Annual Work Plans are consistent with the strategy. The Cooperating Country agrees that AID will participate in the review of the strategy guidelines.

The Cooperating Country will ensure that the CIC/RD will review and approve jointly with AID the Project Annual Work Plans as submitted by the Project Technical Group and assure that these plans are consistent with its strategy guidelines.

6.2.5. Project Technical Group

The Cooperating Country will ensure that a Project Technical Group is established, with representatives appointed from the three Participating Agencies, with the mandate to: develop work plans consistent with the strategy guidelines issued by the CIC/RD, review survey proposals, standardize methodologies, promote collaboration on survey activities, discuss research results, organize seminars and workshops, forward current analysis to policy makers, and prepare the Joint Annual Work Plans and submit them to the CIC/RD.

6.2.6. Local Costs

The Cooperating Country will ensure that the Participating Agencies allocate funds to the project, and assume increasing responsibility for local cost budgets in the amounts and for the purposes specified in Annex 1 of the Project Grant Agreement.

7. EVALUATION PLAN

Two evaluations will be conducted during the project. The first will be a mid-term evaluation scheduled for about September 1988. The second will take place near the end of the project, around June 1991.

By the end of the second year of the project it is expected that technical assistance and other project inputs will be in place, long-term training will have begun, work plans will have been established, and surveys will be underway. It is unlikely though that much survey and publication activity will have been completed, so project impact on GOR agricultural policy formulation will probably have had little opportunity to occur. Therefore, the first evaluation will be a review of project implementation rather than an assessment of impact.

The first evaluation will review the implementation status of all project elements. It will assess the status of project inputs, especially the provision of technical assistance and arrangements for various types of training. It will examine the project's survey activities already underway and review plans for the future, paying particular attention to how research agendas were established and work plans formulated. In particular, it will examine whether the Project Technical Group preparation of annual work plans and the CIC review system is enabling project resources to be used in a manner which is responsive to policy makers' needs and whether any modifications are needed to improve the timely and appropriate programming of project resources.

This first evaluation will be primarily an in-house review, relying on OAR and GOR personnel. Participation of a REDSO economist will be solicited, and funding will be provided for the services of a consultant, probably a specialist in institutional development, who would lend an outsider's perspective.

In addition, funds are budgeted for independent audits, should this prove necessary.

The final evaluation will have a broader mandate. First, it will assess in depth the progress of the project. Besides examining adequacy of inputs and performance of technical assistance, it will assess GOR participation at all levels of the project. The evaluation will judge the participating GOR agencies' capabilities of fully taking over survey activities without outside assistance.

Second, at a broader level the evaluation will assess the project's success in meeting its purpose and goal. It will consider to what extent and how the GOR has used project-sponsored survey results and recommendations from appropriate analysis for policy formulation. It will also attempt to judge or forecast the impact of policies influenced by the project on economic performance in the rural sector. Agricultural survey data collected under the project should serve as a useful baseline for this.

This final evaluation will also be a joint GOR/OAR undertaking, with personnel from both the Rwandan and U.S. governments involved in establishing

its terms of reference and participating in consultations. However, two outside consultants funded by the project, an economist and an institutional development specialist, will be responsible for actually carrying out the evaluation.

ACTION AID-3 INFO CIA

ACTION TAKEN: *Call*DATE: *12/16*BY: *MFE*

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TO RUEFHQB/AMEMBASSY KIGALI 6525

INFO RUEHQB/SECSTATE WASHDC 8939

URGAS NAIROBI 42325

AIRAC

E.O. 12333: N/A

SUBJECT: RWANDA: AG. SURVEYS AND POLICY ANALYSIS PID
(696-2126)

1. REDSO/ESA HELD A REVIEW MEETING OF SUBJECT PID ON NOVEMBER 15TH. REDSO/ESA CONCURS WITH THE APPROVAL OF THE PID, SUBJECT TO INCLUSION OF A STATEMENT ON CONSIDERATION OF THE GRAY AMENDMENT. THE FOLLOWING SETS OUT GUIDANCE FOR PROCEEDING WITH THE PROJECT DESIGN.

A. BECAUSE OF THE CRUCIAL IMPORTANCE OF THE INSTITUTIONAL ROLE OF THE AGRICULTURAL SURVEY UNIT, ITS INSTITUTIONAL LOCATION AND FORM MUST BE DETERMINED BY THE GOV PRIOR TO COMMENCEMENT OF THE DESIGN OF THE PP. TO ASSIST IN THIS ENDEAVOR, USAID SHOULD HIRE A SHORT TERM CONSULTANT TO ANALYZE THE VARIOUS OPTIONS. CONSIDERATION SHOULD BE GIVEN TO THE ADVANTAGE OF THE UNIT BEING SEMI-AUTONOMOUS, SUCH AS: THE BROADEST POSSIBLE RANGE OF POLICY USERS; COORDINATION WITH OTHER BODIES AND OTHER DATA COLLECTION/ANALYSIS EFFORTS; EFFICIENCY IN CONTRACTING FOR CONSULTANTS; AND, IN PROVISION OF ADEQUATE INCENTIVES TO RETAIN QUALIFIED STAFF. SELECTION OF THE INSTITUTIONAL FORM AND LOCATION OUGHT TO TAKE INTO ACCOUNT THE LONG TERM OBJECTIVE OF THE UNIT.

B. THE PP TEAM NEEDS TO FOCUS ON THE UNIT'S OBJECTIVE OF PROVIDING DATA TO SUPPORT POLICY-MAKING AND MECHANISMS TO STIMULATE BOTH THE DEMAND FOR AND USE OF THE DATA BY POLICY-MAKERS. THE INSTITUTIONAL FORM OF THE UNIT AND THE RELATIVE WEIGHT GIVEN TO TECHNICAL ASSISTANCE INPUTS OUGHT TO REFLECT THIS OBJECTIVE. THE PP SHOULD SPECIFY SOCIAL AND ECONOMIC DATA COLLECTED BY OTHER ORGANIZATIONS TO DETERMINE THE TYPE OF INFORMATION THE UNIT WILL COLLECT ON A REGULAR OR PERIODIC BASIS AND WHETHER A NATIONAL SAMPLE SHOULD BE USED. THE ROLE OF THE AGRICULTURAL SURVEY UNIT VIS A VIS THE OTHER ORGANIZATION SHOULD BE DESCRIBED AND POSSIBLE LINKAGES SPECIFIED. THE PID STATES THAT DURING THE PP DESIGN THE GOV SHOULD BE PRESENTED WITH OPTIONS REGARDING THE KIND OF INFORMATION THE UNIT SHOULD COLLECT AND ANALYZE AND THEIR ASSOCIATED COSTS. USAID SHOULD CONSIDER PRESENTING THE INFORMATION AT A SEMINAR SO THAT

AGREEMENT CAN BE REACHED THROUGH DISCUSSION BETWEEN DIFFERENT POTENTIAL USERS.

C. USAID IS REMINDED TO INCLUDE IN THE PP ANY WAIVERS REQUIRED AND CONSIDERATION OF THE GRAY AMENDMENT. THE GRAY AMENDMENT DISCUSSION IN THE PP IS IN ADDITION TO THE DISCUSSION REQUIRED IN THE PID. A 25% FINANCIAL CONTRIBUTION FROM THE GOR IS REQUIRED. BECAUSE OF THE POTENTIAL IMPORTANCE OF THE PROJECT TO AID AND GOR PROGRAMS, THE PROJECT SHOULD BE IMPLEMENTED THROUGH A CONTRACT, RATHER THAN A COOPERATIVE AGREEMENT. THE CONTRACTOR NEEDS TO BE ABLE TO PROVIDE WELL QUALIFIED TECHNICAL ASSISTANTS ALONG THE SPECTRUM OF SURVEY DESIGN TO POLICY ANALYSIS.

D. IT IS SUGGESTED THAT THE PP DESIGN TEAM REVIEW THE PID BUDGET AMOUNTS FOR CONTINGENCIES AND INFLATION WHICH CURRENTLY CONSTITUTE 3% OF THE TOTAL. CONTINGENCY AND INFLATION FIGURES OF 1% EACH HAVE BEEN FREQUENTLY USED IN THE RECENT PAST, AND THE AMOUNT ALLOCATED TO COVER COST ESCALATION MUST BE COMPOUNDED FOR EACH ADDITIONAL YEAR OF THE PROJECT AFTER THE FIRST. THIS WOULD SUBSTANTIALLY INCREASE THE PROJECT BUDGET. ADDITIONAL GUIDANCE FOR THE PP TEAM HAS BEEN PROVIDED TO USAID BY REMC.

E. UPON FURTHER REVIEW, IT APPEARS THAT THE ENVIRONMENTAL THRESHOLD DISCUSSION (P.10) IS INCONSISTENT WITH ANNEX C, AND THAT IN THE LATTER NO WORKSHEETS ARE REQUIRED. REQUEST USAID RECONCILE ENVIRONMENTAL STATEMENTS AND ADVISE REDSO TO OBTAIN FORMAL CONCURRENCE OF ENVIRONMENTAL OFFICER AND APPROVAL OF RLA. TRAIL

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ANNEX B

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 86 to FY 91
Total U.S. Funding: \$7.0 million
Date Prepared: 8/86

Project Title & Number: Agricultural Surveys and Policy Analysis 696-0126

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes: To increase productivity & employment on and off the farm</p>	<p>Measures of Goal Achievement:</p> <ol style="list-style-type: none"> 1. Increase in total agricultural production 2. Increase in gross and net farm incomes 3. Increase in off-farm employment 	<p>Donor Economic reports Project Evaluations GOR Reports ASAU Survey data, analyses</p>	<p>Assumptions for achieving goal targets:</p> <ol style="list-style-type: none"> 1. GOR policy-makers remain committed to rural development 2. Economic and political stability
<p>Project Purpose: T. To improve policy formulation for the rural economy</p>	<p>Conditions that will indicate purpose has been achieved: End of project status:</p> <ol style="list-style-type: none"> 1. Improved agricultural policies (e. g. more market-oriented pricing) 2. Increased demand of policy makers for information, analysis; on-going dialogue between GOR ag-research technicians and GOR policy makers 3. Increased role of MINAGRI in ag. policy formulation 4. SESA and other project-supported services recognized by GOR as responsive to needs (i.e. provision of analysis) of policy makers 5. Improved collaboration among GOR agencies involved in formulation of agricultural policy 6. GOR-OAR policy dialogue based on surveys and study results 	<ol style="list-style-type: none"> 1. GOR legislation, decrees, regulations 2. References to project-related reports in GOR policy statements 3. Requests by GOR policy makers for project-related information and services 4. Meetings of GOR analysts with agricultural policy-makers 5. Communications between agencies supported by Project 6. Meetings between GOR policy-makers and AID 7. Project evaluations 	<p>Assumptions for achieving purpose:</p> <ol style="list-style-type: none"> 1. GOR policy-makers willing to use survey data and analysis. 2. Trained GOR staff can be retained 3. Political environment for policy dialogue remains stable

<p>Outputs:</p> <ol style="list-style-type: none"> 1. Rwandan staff trained in data collection & analysis 2. Analyses based on integrated data base (Household Budget & Consumption Survey, Ag. Surveys) 3. Completed national agricultural survey 4. Analysis, publications of agricultural survey and socio-economic data which responds to the needs of policy-makers 	<p>Magnitude of Outputs:</p> <ol style="list-style-type: none"> 1. 8 counterparts trained 2. Completion of national ag. survey 3. Completion of periodic surveys 4. At least 12 special studies 	<ol style="list-style-type: none"> 1. Participants in U.S. universities, academic record 2. Survey annual reports (by years) 3. Publications from project-supported activities 4. Contractor quarterly reports 5. ASAU reports 6. Project evaluations 	<p>Assumptions for achieving outputs:</p> <ol style="list-style-type: none"> 1. GOR staff remains in place 2. Suitable training programs can be provided; expatriate advisers are effective trainers on-the-job 3. ASAU able to prioritize work to demands for policy studies
<p>Inputs:</p> <p>AID</p> <ol style="list-style-type: none"> 1. Technical assistance 2. Participants 3. Commodities 4. Local Operations Costs 5. Construction 6. Workshops <p>GOR</p> <ol style="list-style-type: none"> 1. Counterparts, support staff 2. Survey staff 3. Recurrent costs 4. Land, office space 	<p>Implementation Target (Type and Quantity):</p> <p>See PP for details - AID</p> <ol style="list-style-type: none"> 1. 16 person-years long term 40 person-months short term 2. 8 Masters degrees 47 person-months short-term international training 8 counterparts on-the-job training 3. 14 computers, software, 14 vehicles 20 motorcycles 10 sets household furniture 4. \$ for local operating costs 5. SESA office extension 6. 12+ seminars/workshops 	<p>\$ amount in AID reports FRW in GOR reports</p>	<p>Assumptions for providing inputs:</p> <ol style="list-style-type: none"> 1. Sufficient pool of qualified expatriate personnel exists and can be expeditiously contracted 2. GOR & AID funding can be provided on a timely basis 3. GOR contributes staff and recurrent costs 4. Suitable participants can be identified and permitted to take training

5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only: B.1. applies to all projects funded with Development Assistance loans, and B.3. applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

Yes

A. GENERAL CRITERIA FOR PROJECT

1. FY 1986 Continuing Resolution Sec. 524; FAA Sec. 634A.

Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project.

CN forwarded to Congress on July 16, 1986

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$500,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

Yes

Yes

3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?

No further legislative action is required

4. FAA Sec. 611(b); FY 1986
Continuing Resolution Sec.
501. If for water or
water-related land resource
construction, has project met
the principles, standards,
and procedures established
pursuant to the Water
Resources Planning Act (42
U.S.C. 1962, et seq.)? (See
AID Handbook 3 for new
guidelines.)

N/A

5. FAA Sec. 611(e). If project
is capital assistance (e.g.,
construction), and all U.S.
assistance for it will exceed
\$1 million, has Mission
Director certified and
Regional Assistant
Administrator taken into
consideration the country's
capability effectively to
maintain and utilize the
project?

N/A

6. FAA Sec. 209. Is project
susceptible to execution as
part of regional or
multilateral project? If so,
why is project not so
executed? Information and
conclusion whether assistance
will encourage regional
development programs.

No. The project will focus on
increasing the government's
ability to collect statistics in
country, and such information tends
to be country-specific and not
subject to regional execution.

7. FAA Sec. 601(a). Information
and conclusions whether
projects will encourage
efforts of the country to:
(a) increase the flow of
international trade; (b)
foster private initiative and
competition; and (c)
encourage development and use
of cooperatives, and credit
unions, and savings and loan
associations; (d) discourage
monopolistic practices; (e)
improve technical efficiency
of industry, agriculture and
commerce; and (f) strengthen
free labor unions.

The project will help the GOR to
formulate better policies to stimulat
agricultural protection and, thus,
should have a positive impact
increasing trade, foster private
initiative and possibly encourage
the eventual development of
cooperatives as well as discourage
monopolies. Project is expected to
have no impact on F
(no free labor unions in Rwanda).

8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

Project will finance U.S. commodities and technical assistance in Rwanda; will help establish better economic environment for U.S. private trade and investment

9. FAA Sec. 612(b), 636(h); FY 1986 Continuing Resolution Sec. 507. Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.

GOR contribution exceeds 25% of project total; budget estimates carefully developed based on predecessor project. U.S. does not own Rwanda Francs.

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

No

11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise?

Yes

12. FY 1986 Continuing Resolution Sec. 522. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity?

N/A

13. FAA 118(c) and (d). Does the project comply with the environmental procedures set forth in AID Regulation 16. Does the project or program take into consideration the problem of the destruction of tropical forests?

Yes

N/A

14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)?

N/A

15. FY 1986 Continuing Resolution Sec. 533. Is disbursement of the assistance conditioned solely on the basis of the policies of any multilateral institution?

No

16. ISDCA of 1985 Sec. 310. For development assistance projects, how much of the funds will be available only for activities of economically and socially disadvantaged enterprises, historically black colleges and universities, and private and voluntary organizations which are controlled by individuals who are black Americans, Hispanic Americans, or Native Americans, or who are economically or socially disadvantaged (including women)?

8(a) IQC will be used for commodity procurement, and TA firm will be encouraged to subcontract with minority institutions.

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance
Project Criteria

- a. FAA Sec. 102(a), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status, (e) utilize and encourage regional cooperation by developing countries?
- a) Through policy-oriented studies project will assist the government to adopt better agriculture policies, leading to use of more appropriate technology and increased agriculture production by rural farmers, thus involving them in development at the same time.
- b) By the same token, the government's adopting better agriculture policies will assist the poor to help themselves towards a better life, perhaps assisting in the development of cooperatives as part of this process.
- c) By the same token, this project is helping the GOR's own efforts to develop the agriculture sector.
- d) Because women perform much of the agriculture work in Rwanda, more informed government policies will promote the participation of women in development, improving their status as well.
- e) The project will not have a direct effect on encouraging regional cooperatives, although the use of cooperatives may increase through better agriculture policies.

b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?

Yes

c. FAA Sec. 107. Is emphasis on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

Project funded studies will provide information on this.

d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed country")?

Yes

e. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

Yes. This is a Phase II project building on a previous project designed, ultimately, to increase productive capacities through the adoption of better agriculture policies. The improved agriculture policies will help the GOR to use its agriculture resources better, leading to self-sustained economic growth.

f. FAA Sec. 281(b). If the activity attempts to increase the institutional capabilities of private organizations or the government of the country, or if it attempts to stimulate scientific and technological research, has it been designed and will it be monitored to ensure that the ultimate beneficiaries are the poor majority?

g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government.

Yes. The project will have two evaluations, and part of the evaluation's task during the end-of-project evaluation will be to assess whether the project is assisting the government to adopt policies aimed at benefitting the poor majority/farmers.

- a) Project focuses largely on institutional development of GOR helping it to develop better policies encouraging farmers to increase their agricultural capacities/productivity.
- b) The project will work with government specialists in data collection and increase their capacities and those of the institutions with whom they work.
- c) The project will provide long + short term training, increasing participants' capacities and their participation in government decisions affecting agriculture policies.

2. Development Assistance Project
Criteria (Loans Only)

N/A

- a. FAA Sec. 122(b).
Information and conclusion on capacity of the country to repay the loan, at a reasonable rate of interest.
- b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?

3. Economic Support Fund Project
Criteria

N/A

- a. FAA Sec. 531(a). Will this assistance promote economic and political stability? To the maximum extent feasible, is this assistance consistent with the policy directions, purposes, and programs of part I of the FAA?
- b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities?
- c. ISDCA of 1985 Sec. 207. Will ESF funds be used to finance the construction of, or the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified

that such country is a party to the Treaty on the Non-Proliferation of Nuclear Weapons or the Treaty for the Prohibition of Nuclear Weapons in Latin America (the "Treaty of Tlatelolco"), cooperates fully with the IAEA, and pursues nonproliferation policies consistent with those of the United States?

d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

Que de la part de l'AID, il y ait une volonté réelle et concrète du renforcement des activités du projet d'enquêtes et des statistiques agricoles déjà commencées pendant la première phase et qu'une certaine continuité soit assurée.

Qu'il y ait en plus de la coordination des activités, un minimum d'autonomie au niveau de chaque service qui contribuerait à son efficacité.

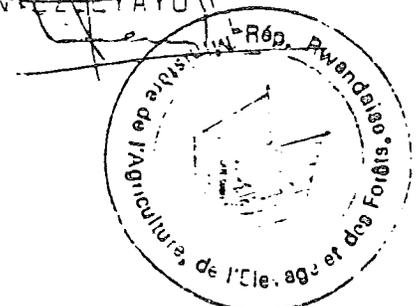
Le CIC étant un appareil purement interne de coordination et de concertation entre les ministères, les liens organiques entre le groupe technique et le CIC ne doivent pas nécessairement être cités dans le présent document. Chaque ministère étant responsable de la définition de ses priorités et chaque membre du groupe technique étant responsable par entière du respect de telles priorités, l'AID établira des liens professionnels seulement avec le groupe technique et non avec le groupe consultatif qu'est le CIC.

Tels sont, Monsieur l'Attaché pour la Coopération, les quelques commentaires que mon département a le plaisir de soumettre à votre entière attention.

Veillez agréer, Monsieur l'Attaché, l'assurance de ma très haute considération.

Le Ministre de l'Agriculture, de
l'Élevage et des Forêts

A. NIZIYAYO



ANNEX E.1 INSTITUTIONAL ANALYSIS

This analysis discusses the various institutional formats appropriate to the project for the collection of data on the rural economy and its use for policy analysis and formulation and it recommends the institutional arrangement which appears to be the most sound. It consists of five sections:

1. Introduction
2. Rural Sector Data Collection and Analysis in Rwanda
3. Other Donor Activity
4. Alternative Institutional Arrangements
5. Recommendations

1. INTRODUCTION

There are four distinct and realistic institutional options available to the project:

- (1) continued location of the project in the Agricultural Surveys and Statistics Service of the Ministry of Agriculture;
- (2) establishment of a new unit such as National Institute for Statistics and Development Studies;
- (3) design of a multi-component project with assistance to several different agencies but no formal coordination; or
- (4) centralization of some elements of the data collection, processing, analysis, and policy formulation processes.

The analysis will reveal that of these institutional arrangements it is basically a combination of the latter two which is soundest given the current state of data collection and analysis by GOR services. A multi-component project coordinated by a Project Technical Group will likely have the greatest impact upon the policy formulation process. The key institutions in this analysis are the Ministry of Agriculture (MINAGRI), the Ministry of Plan (MINIPLAN), and the Ministry of Finance and Economy (MINIFINECO).

2. CURRENT STATUS OF RURAL SECTOR DATA COLLECTION AND ANALYSIS

A fairly large number of Rwandan agencies are concerned with the collection and analysis of data on the country's rural economy. Below is a description of the more important players in this field followed by an analysis of the current institutional relations among them.

2.1 Agricultural Surveys and Statistics Service (SESA)

As the formal administrative structure of AID's Agricultural Survey and Analysis Project (696-0115), this unit will be central to whatever form the Agricultural Surveys and Policy Analysis Project takes.

As a donor-financed project, SESA is not formally integrated into the MINAGRI structure. The Project Director is responsible to the Secretary General of MINAGRI in his role as President of the National Agriculture Survey Commission. This is composed of representatives of the Ministry of Plan, Ministry of Finance and Economy, Ministry of Interior, and the Mouvement Revolutionnaire National pour le Developpement.

SESA commands considerable physical and human resources. Its personnel currently includes five university educated Rwandan professionals (A-0 level, an M.A. equivalent) at its headquarters; three expatriate advisors (two Americans and one Belgian), as well as access to short term technical assistance from the U.S. Bureau of the Census and Michigan State University; and a field staff of 10 prefecture-level supervisors, 15 verifiers, and 78 enumerators. In addition, the service has a fleet of six vehicles and three micro-computers for processing and analyzing data. Its most important resource is intangible - the experience gained from carrying out the 1984 national agricultural survey and follow-on studies. Its current activities include in-depth analyses of the survey data, a crop prediction/food security survey based largely on a farmer opinion poll, a survey of sorghum and bean commercialization by farmers, and consultancies with a number of MINAGRI projects as well as with the Direction de Controle et Evaluation des Projets on the design and implementation of baseline data surveys.

SESA has gained a good reputation within MINAGRI as a source of both counsel on survey methodology and useful technical knowledge. Top officials at the Ministry express satisfaction with and interest in the unit's work and they have used the survey results for both planning and implementation. The Directors General of Livestock, Agricultural Production and Soil Conservation have "shopping lists" of surveys they would like SESA to perform. SESA has corrected the 1985 estimates on crop and livestock production prepared by local MINAGRI agents, bringing them into line with the findings of the 1984 national agricultural survey, which are considered more accurate. SESA's capabilities and published results have not yet been brought to bear on policy decisions made outside the MINAGRI, such as the recent GOR decision to establish price floors for beans.

MINAGRI is planning to maintain SESA's structural position directly under the Secretary General, where it forms a policy advisory and review unit alongside the Direction des Etudes et Planification and the Direction de Controle et Evaluation. This complements the World Bank's institutional support project (see Section 3 below) which is aiming, among other things, to reinforce the analytical capabilities of these services. Greater integration at the administrative level should enhance the value of SESA's contribution to MINAGRI policy formulation through improving the Ministry's capacity to identify, monitor and evaluate both its current portfolio of 60 projects and especially of projects planned for the future.

As a project-supported unit SESA has financial and management autonomy despite its strong position within the MINAGRI. Continuing this arrangement is highly desirable. Although it is under the administrative aegis (tutelle) of the Ministry, it is removed from day-to-day operational control. Autonomy has meant control of its own resources, which gives it strength. Too much

integration could side-track SESA's resources. This would hinder the unit's growth into a tool for policy analysis. Further, it could create strong temptations to divert AID-funded resources to other MINAGRI purposes, thereby diluting SESA's ability to carry out its survey and analysis program.

2.2.1 Direction Generale des Forets

The collection of forestry statistics is both well financed and well organized. DG Forets has its own Bureau de Statistiques and enjoys support from two donor-financed projects in this area. Swiss Cooperation is providing professional training and technical training in aerial photographic interpretation while the Canadian International Development Administration is providing assistance with on-site verification of the results. Using this methodology, DG Forets has undertaken a national survey of forestry conditions in Rwanda with a sample of 90 sectors. They are able to use their staff of forestry technicians as on-site verifiers and will shortly have their own data-processing capability in the form of one or two micro-computers.

2.2.2 Ministry of Plan (MINIPLAN)

Under the presidential decree which sets forth the responsibilities of the various branches of the Rwandan national government, MINIPLAN is responsible for the coordination of all data collection and processing activities and ensures their relevance to the design, implementation and evaluation of the Five-Year National Development Plan. The Direction Generale de la Statistique is responsible for coordinating all statistical work, planning all public sector statistical surveys, supervising all training of statistics personnel, and coordinating all statistical and survey methodologies. The Direction Generale du Service National de l'Informatique, which at the moment has neither staff nor budgetary resources, is responsible for the planning and coordination of all GOR data processing efforts, including purchase and use of both computer hardware and software.

Currently, the lack of human and physical resources has prevented MINIPLAN from being able to perform according to its mandate. There are instances in which the DG Statistique has not been able to accomplish the tasks assigned to it for this reason: the unit has not followed-up and maintained the integrity of a national sample frame, thereby introducing errors into its own Household Budget and Consumption Survey, as well as into the national agriculture and fertility surveys; as of early February, 1986 the national economic accounts for 1984 had not yet been compiled and published; there is no standard methodology in DG Statistique's collection and analysis of price and employment data; there is considerable difficulty in processing and analyzing the volumes of data collected in the National Household Budget and Consumption Survey; a request from the Ministry of the Civil Service and Employment for technical and computer assistance went unanswered; and, as a last example, the Ministry of the Interior has begun compiling its own statistics on the use and achievements of umuganda (weekly contribution of community labor, which is the most important resource available to local governments), after MINIPLAN, which was nominally responsible for the work, did not do it. Thus it is apparent that MINIPLAN currently is being taxed beyond its capability.

The Direction Generale de la Statistique, in its Direction des Enquetes Statistiques, has only two professional statisticians with university training, 4 para-professionals, 10 statistics agents in the prefectures, and 33 enumerators and data-entry personnel. This small staff is theoretically responsible for a wide range of socio-economic surveys, such as price series and analyses of health conditions, as well as coordination of all other statistical surveys. The unit's physical means consist of two vehicles and, until recently, no computer or other data-processing equipment (within the past two months AID has brought in 2 IBM XTs and an AT on loan from SESA). Despite this it has an ambitious program of statistical survey and analysis in the near future: completion of the Household Budget and Consumption Survey and the start of an Informal Sector Survey in 1986; a National Employment Survey in 1987-88; a Health-Education Survey in 1989; a General Socio-Economic Survey in 1990; and a number of smaller surveys alongside these.

The Direction Generale de l'Informatique, created by presidential decree in May, 1985, has even fewer resources. Its staff is limited to an acting Director General and it has no physical resources to speak of.

2.2.3 National Population Office (ONAPO)

Created in 1980 to be responsible within the GOR for population and demographic affairs, this autonomous office of the Ministry of Public Health and Social Affairs already has one of the best regarded statistical and survey operations in Rwanda. This is in large part due to the experience and reputation it gained during its 1983 National Fertility Survey. This was carried out by a field staff of 90 enumerators, controllers and supervisors and a central staff of 10 verifiers, under the direction of two Rwandan survey professionals and an expatriate UNFPA advisor. The published results of the survey were comprehensive, accurate and easily accessible to policy-makers and other users without statistical or demographic training. ONAPO's importance in this area will increase because it will carry out the 1988 National Population Census and it has already planned post-census and mortality-urbanization-migration surveys in 1989 and 1990, respectively.

ONAPO is well-endowed for statistical and survey work. Its material means are good, including a large vehicle fleet and three IBM-XT micro-computers. Its administrative and statistical survey staffs are experienced. ONAPO does not have permanent field survey staff. They used temporary personnel for enumeration and data entry during the Fertility Survey and were pleased with the results. They plan to use similar arrangements in the future for censuses and surveys.

2.2.4 Other Major Sources of Statistics on the Rural Economy

2.2.4.1 Banque Nationale du Rwanda (BNR)

The BNR, which is the central bank, is generally considered the best source of general economic information about Rwanda. Its reports on macro-economic data (money supply, price indices, balance of trade, etc.) are

published promptly and considered quite accurate. It has a well-organized and effective staff for both data collection and economic analysis, and has its own Hewlett-Packard mainframe computer for data processing.

2.2.4.2 Ministry of Finance and the Economy (MINIFINECO)

This Ministry collects and analyzes two different types of economic statistics. Its Department of Finance is responsible for statistics on the central government budget, customs receipts and other sources of revenue from both individuals and businesses. It is the focus of a World Bank institutional support project which will reorganize and computerize its operations.

The Department of the Economy follows prices as well as general market movements and trends. Its collection, analysis and publication of these data is considered efficient, but the Department is hampered by its limited internal computerization relative to its workload. Additional computer hardware would allow it to increase its productivity and consequently the amount of information available to the Ministry for policy formulation.

2.2.4.3 Ministry of the Civil Service and Employment (MINIFOPE)

Through its Direction Generale de l'Emploi et de la Securite Sociale, this Ministry is charged with maintaining statistics on all employees and employers in Rwanda. The sources of their statistics are annual questionnaires returned by all employers to the prefectoral labor inspectors, who then compile the data and send reports to Kigali for further compilation at the national level. Because of a lack of personnel and other means (including access to computers), they have been able to handle the "modern" sector only although they are quite aware of the importance of the "informal" and artisanal sectors. Despite their lack of resources, they believe that their current data, if properly processed, could yield a complete analysis of the entire employment situation in Rwanda.

2.2.4.4 Ministry of Primary and Secondary Education (MINIPRISEC)

This Ministry's Direction Generale des Etudes et Recherches Pedagogiques collects data on the number of pupils, number and condition of school buildings, and the number and characteristics of administrative and professional staff. The results are published in an annual statistical yearbook. The Ministry plans to computerize this operation in the near future.

2.2.4.5 National Census Bureau

This service attached to the Ministry of the Presidency was created in order to organize, carry out and analyze the 1978 population census. It is likely, however, that the 1988 census will be carried out by ONAPO instead. The Census Bureau therefore is currently inactive and awaits a decision as to its future activities or possible dissolution. The Census Bureau has a Computing Service which is comprised of two professionals and until recently operated a 10-year old NCR mainframe (with less computing power than many present micro-computers and now defunct) and a 5-year old Cromemco micro-computer with only 64K RAM capacity.

2.2.4.6 Ministry of Industry, Mines and Artisanry (MINIMART)

This Ministry's Direction des Agro-Industries is responsible for publishing annual statistics describing Rwanda's agro-industries in terms of micro-economic indicators such as capacity, production, sales, and employment. However, it has been unable until now to publish these statistics for two reasons. First, the unit has only two professionals, including the Director, and no physical means. Second, it has not been able to elicit sufficient cooperation from the agro-industrial enterprises. Its source of data is supposed to be a questionnaire sent from its Kigali office. It receives few responses, however, because of the fear that the information will be passed to the revenue authorities.

2.2.4.7 The National Institute for Agricultural Research (ISAR)

ISAR is currently conducting research at five regional stations and at the central facility in Rubona. They are generating a great deal of data. Researchers want rapid analyses so that planning for the following season's experiments can be quickly undertaken. Currently they have few tools for doing analysis. Some simply calculate means. Others use TI59 calculators, the most sophisticated piece of equipment in the ISAR arsenal. If ISAR's research agenda is to be made relevant to the agricultural problems of the country, which is essential for planning and policy formulation, then their statistical ability must be strengthened.

2.3 Institutional Relations

The collection, processing and analysis of statistical information in Rwanda is currently diffused among a large number of institutions. The diffusion seems to be the result of two factors: the diverse and legitimate needs of the many agencies which require statistical analysis to perform their roles; and the lack of human and material resources at the Ministry of Plan, which prevents it from carrying out its assigned duties.

In looking at the relations among the statistical services and their impact on policy analysis, it is useful to distinguish between "traditional" or non scientific and "new" or scientific methods of data collection. Traditional statistical services are those in which data are collected by GOR field agents with divergent and possibly conflicting primary responsibilities. Examples of this would be the compilation of local agricultural production statistics by the moniteurs agricoles who are also extension agents or the reporting of data on the education sector by regional school inspectors. The methodology tends to be haphazard and piecemeal. Both the abilities of the data collectors and their coordination with one another are questionable. These data are not to be subjected to rigorous statistical analysis. They are presented in summary compilations and tabulations. The policy impact of these traditional statistical efforts taken alone is limited at best as there is little qualitative information for policy makers to glean from reports. The reports are used instead as inexact benchmarks of a particular Ministry's progress in formulating and evaluating the targets of the National Development Plan.

In contrast, the "new" statistical collection and analysis services - SESA, ONAPO and the Direction des Enquetes Statistiques of MINIPLAN - use scientific survey methods in the collection and analysis of data. The two more effective units have autonomy. These new statistical activities are systematic and actively coordinate on the basis of professional relationships. SESA's National Agriculture Survey and ONAPO's Fertility Survey (as well as, to a lesser extent, the Household Budget and Consumption Survey of MINIPLAN's Direction des Enquetes Statistiques) share much the same sample frame as well as similar methodologies for data collection and processing. This collaboration will enable ONAPO later this year to correlate the findings of the agriculture and fertility surveys in search of possible relationships between demographic and production variables. ONAPO and SESA also have shared technical personnel, such as computer programmers, as well as vehicles for transportation of field workers and computing resources. The new statistical work, with low margins of error, can be used effectively for policy formulation.

3. OTHER DONOR ACTIVITY

Three other donors - the United Nations Development Program, the United Nations Fund for Population Activities, and the World Bank - will be involved in data collection activities on Rwanda's rural economy.

3.1 United Nation Development Program (UNDP)

The UNDP is providing assistance to the Ministry of Plan. The current phase will end in 1987. A second phase is being planned. The thrust of this effort is to improve the planning process, with special attention to the Direction Generale de la Planification/Section Macro-Economique, and focusing on upgrading its capacity to provide macro-economic statistics for national income accounting. The next phase of this project, which will be funded for about \$2.5 million over 5 years, will continue this emphasis. One long-term expert in national income accounting may be made available to the Direction Generale de la Statistique.

The UNDP believes it is necessary to increase the ability of the Direction Generale de la Statistique to coordinate and interpret other statistical work in order to facilitate the planning process. They are actively seeking the collaboration of other donors, including AID, in this effort.

3.2 World Bank

Two World Bank institutional support projects strengthen the MINAGRI at the level of the Secretariat General. These are both substantive (Direction des Etudes et Planification and Direction de Controle et Evaluation) and administrative (Courier et Archives, Gestion des Credits, Services de Personnel). For the two substantive services, the Bank will provide long-term training and technical assistance in the areas of Agricultural Economics, Animal Science, Agro-Industry, and the Computer Sciences. It will finance also the purchase of micro-computers and vehicles. Support to MINAGRI's planning and evaluation staffs should facilitate the integration of quantitative analysis into the policy formulation process.

At MINFINECO, the Bank will finance a program to improve the management of public finance. The three components of this project will be (1) computerization of the Direction Generale des Impots, including purchase of equipment and appropriate training; (2) improvement of procedures of tax collection and revenue management; and (3) improvement of procedures for debt management.

3.3 United Nations Fund for Population Activities (UNFPA)

UNFPA plans to continue its support of ONAPO at least through the end of the current program, which is likely to include the national census and two follow-on surveys. Although their programming process is not yet at the project identification stage, they have a tentative idea of the inputs they would provide. These would include: an expert in demographic research, assistance to ONAPO in meeting the recurrent logistical costs of the census and surveys (especially the preparation of demographic maps) if they are undertaken, and the purchase of two or more IBM-AT micro-computers for data processing and analysis. Both UNFPA and ONAPO would welcome continued AID cooperation in these efforts. They believe that AID could achieve the greatest impact by providing short-term technical assistance and short-term and long-term training in the areas of computer science and data-processing.

4. ALTERNATIVE INSTITUTIONAL ARRANGEMENTS

This discussion reviews the advantages and disadvantages of the various institutional arrangements outlined earlier in terms of the GOR's needs for statistics and analysis.

4.1 Continue current institutional focus on the Agricultural Surveys and Statistics Service (SESA)

Under this alternative there would be no substantive change from the institutional arrangements of the current Agricultural Survey and Analysis Project.

Advantages: The current arrangement works fairly well and continued support would leverage AID funds. SESA's activities and capacities are indeed of great interest to MINAGRI planners. Their advice on survey design and project evaluation is regularly sought. Their production statistics are routinely used to determine MINAGRI's contribution to the National Development Plan and to design the national food security strategy.

Disadvantages: Very promising links exist among the new statistical activities - ONAPO, the Household Budget and Consumption Survey, and SESA - and an exclusive focus on SESA would likely undermine efforts to establish an integrated data base.

4.2 Create a Central Unit for all Statistical and Data Processing Activities

Advantages: At first glance this alternative has the appeal of being a direct and focused way to cut through the current diffusion of responsibility for data production and analysis. It responds to the stated GOR policy of making the coordination of data collection activities the responsibility of MINIPLAN. This alternative could be considerably more efficient than current arrangements, if certain economies of scale are possible. For instance, centralization could possibly reduce the GOR's recurrent cost burden by using one management structure and one large team of field personnel for all surveys, agricultural and demographic as well as economic. A centralized service could offer the best possibilities of full integration of all data collection, e.g., cross-analyzing health, agricultural and educational statistics.

Disadvantages: Centralization would cut against the grain of a number of realities. Building up a central statistics unit would mean tearing down existing services such as all of SESA and parts of ONAPO. Can Rwanda afford to liquidate these important investments in financial and human resources? As well, the hope for scale economies may be illusory. Centralization of management of statistical work would not result in a reduction in field personnel because of the nature of the surveys most likely to be conducted. Also, a centralized statistics unit may face decreasing economies of scale in administration, due both to the shortage of trained managers in Rwanda and the reduced flexibility of a larger organization. Centralization also could lead to divorcing data collected from its potential users. Some individuals have expressed fears that, if there were to be centralization, torturous bureaucratic channels would separate them from the information needed for their jobs. Finally, despite the formal attribution of central coordinating roles to MINIPLAN's DG Statistique and DG Informatique, there are doubts as to the willingness of some persons to promote a full centralization of these functions. The best evidence of this is the recent decision to consider making the 1988 census and follow-on surveys, with all the statistical and data-processing work inherent in them, the responsibility more of ONAPO than of the DG Statistique.

4.3 Design a Project with Several Discrete Components

If the project were designed to include several discrete activities, it should continue and expand its support of the new statistical activities and also seek to improve the traditional data-gathering and analysis work which contributes to AID's programming interests. Thus, one component would include continued support to SESA. A second would help MINIPLAN reinforce the operations of the Direction Generale de la Statistique and possibly bring to life the Direction Generale de l'Informatique. A third would seek to improve both the methodologies and capacities of the traditional statistical services of MINAGRI, MINIFOP, MINIMART and/or MINIFINECO, which deal with rural industry and employment. A fourth component would provide assistance to ISAR to establish a computer-based data entry and analysis capability.

Advantages: From an institutional viewpoint this approach offers two great advantages. First, there would be no disruption of those existing institutional arrangements which are working well. Second, the project would

have the strength of specificity, of addressing easily identifiable needs with focused, concrete actions.

Disadvantages: The problem with this approach is that it does not address the overall problem of policy analysis, of bringing together the disparate elements of data being gathered into a coherent whole. There is a need to improve the capacity of the entire GOR to digest and act on accurate statistical and survey information. If this approach is chosen, a mechanism must be sought for reaching policy-makers with the analyses of the various data collection agencies. The mostly likely bodies to be influenced is the Interministerial Coordination Committees for Rural Development and for Economic Policy. Through a Project Technical Group the analyses furnished by MINAGRI, MINIPLAN, and MINIFINECO could be forwarded to the CICs for Rural Development and for Economic Policy to become essential inputs into the policy formulation process.

4.4 Centralize some elements of the data gathering/policy analysis spectrum

This would be a middle ground between complete centralization on the one hand and the current disparate efforts on the others. The two most promising avenues for limited centralization would be in data processing and policy analysis.

Data Processing

Advantages: The principal attraction of centralizing this activity is a function of the extremely limited availability of human resources - no more than six or eight Rwandans with advanced training in computer sciences. The GOR has set up the Direction Generale de l'Informatique precisely to coordinate the purchase and use of computer hardware and software. Centralization would likely be in DG Informatique, which would implement equipment standardization policies, approve all GOR purchases, and provide consulting services. Further, centralization (i.e., formatting all data for the same hardware and software) here would ensure the compatibility of the data gathered and analyzed by the various survey and statistical services, which would in turn facilitate cross analysis.

Disadvantages: It should be remembered that computers are no longer very expensive: every service can easily have its own equipment. A top of the line IBM-AT micro-computer with 512K RAM capacity, all peripherals and a complete set of software, which is more powerful than the NCR mainframe used to analyze the 1978 population census, costs FRW 1,295,915, or \$14,400, delivered duty-free in Kigali. This is in the same range as vehicles, which are routinely purchased for projects without any attempt at standardization. In these conditions, procurement mistakes can be corrected fairly cheaply, and the cost of delays and the inflexibility of a centralized purchasing system or ill-conceived standardization program would be unacceptably high.

Centralizing Rwandan computer expertise may have undesirable effects. First, the data-processing specialists would be removed from the actual work and less responsive to its needs. Second, it may create a separation between

the users and their machines, as the intermediation of the specialists would always be needed to resolve technical problems. Third, MINIPLAN's shortage of human and physical resources would make additionally burdensome this responsibility anytime in the near future.

While a central control function in data analysis may be undesirable, it could still be useful for the GOR to have an office which records all computing activities. Thus, DG Informatique could serve as a clearinghouse. It would keep track of all GOR computing activities, follow all purchases of computer hardware and software, put agencies and individuals in contact with one another, and possibly develop a consulting capacity.

Policy Analysis

Advantages: The weakness in the current data collection and analysis process is the lack of impact these efforts have on the policy formulation process. MINIPLAN should ensure the reliability and usefulness of statistical information but for the aforementioned reasons is unable to at present. The DG Statistique of MINIPLAN does not have the human and material resources to coordinate or analyze the statistical work of others, and such means as it does have are allocated to carrying out social and economic surveys which often repeat the work of other services.

A first step towards improving this situation would be for the unit to become the GOR's coordinator of statistical information and surveys. It would not have formal responsibilities in this regard, but would be aware of and familiar with all statistical work being carried out in Rwanda. Its success at doing this would give it an informal coordinating role as the first among equals of GOR statistical services. This would also enable it to focus its own survey work on those areas not covered by other services' surveys; there is no need, for example, for both DG Statistique and the Banque Nationale to perform price surveys.

Later, once it had developed both a technical capacity and a better reputation with other GOR services, DG Statistique could more actively promote coordination among them. For example, it could work with ONAPO in the 1988 census, to develop and maintain a national sample frame, whose use by all types of socio-economic surveys would facilitate cross-analysis. To further advance this aim the unit could also develop and enforce standard survey methodologies. Another activity would be for DG Statistique to provide statistical and survey consulting services throughout the GOR, in the way SESA now does within MINAGRI.

To accomplish this transition, DG Statistique would need donor financing of technical assistance, training of Rwandan professionals, and material resources such as vehicles and micro-computers, as well as GOR commitment to assign qualified local staff to training programs and professional slots. In the context of the Agricultural Surveys and Policy Analysis Project, this action would constitute a project component to be carried out alongside support to SESA and other statistical activities for the purpose of establishing an integrated data base.

Disadvantages: A lack of human and material resources at MINIPLAN which has yet to be rectified by the GOR.

5. RECOMMENDATIONS

The recommended institutional arrangement for this project is one which will permit the agencies now collecting and analyzing data on the rural economy to continue to do so, but which will at the same time streamline and facilitate data collection and thereby eliminate needless and costly duplication of effort. In order to accomplish the latter objective a Project Technical Group should be created, composed of representatives of the participating agencies, and mandated to review survey proposals, standardize methodologies, coordinate survey activities, discuss survey results, organize seminars and workshops, forward current analyses to policy-makers and others, and review and clear annual work plans before they are submitted to the CIC for Rural Development for approval. The project should be organized into separate components for support to each ministry. There are three primary considerations in favor of this approach: it takes a broad view of the relationship between information generation and policy-making; it works with rather than against current institutional arrangements; and it imposes little or no extra recurrent cost burden on the GOR.

The specific institutional components of the project are described below.

5.1 Continued support to the Agricultural Surveys and Statistics Service (SESA)

Support to this unit should continue generally along the same lines as under the Agricultural Survey and Analysis Project, with the GOR continuing to pick up a greater share of the recurrent cost burden.

The importance of SESA to MINAGRI is becoming greater. At the recent MINAGRI seminar for planning and reorganization, SESA regularly was called upon to make definitive statements on the agricultural economy of Rwanda. Already its outputs are viewed with confidence within in Ministry. SESA will be involved more in the preparation of work plans presented by the various Directions of MINAGRI and subsequently in assessing the extent to which they are realized. SESA has become a major player within the MINAGRI for planning, evaluation, and policy formulation, and in some respects a model of competency and reliability for other services as well.

5.2 Reinforce the capacity of the Ministry of Planning to integrate survey and statistical work into the planning process

This will mean strengthening two different functions of the Direction Generale de la Statistique. The most important of these is the reinforcement of DG Statistique's own ability to perform statistical survey and analysis work, including completion of the Household Budget and Consumption Survey and the implementation of other socio-economic surveys on its agenda. The other element would be the ability to follow and understand other GOR statistical and survey activities and then channel these into the design and evaluation of the National Development Plan. Not only would this enhance the policy impact of all statistical work but it would enable DG Statistique to program its own work better, thereby avoiding redundancy. Necessary resources for AID support

to DG Statistique include technical assistance and training in survey work and computer science; commodities such as vehicles and micro-computers; and initial support in meeting the increased operating costs of a more active unit and possibly in the financial and administrative management of these resources.

5.3 Study ways to improve traditional data collection efforts and their usefulness for policy

Despite the introduction of scientific survey and statistical efforts, these traditional activities are still important and inexpensive sources of information. Improving their reliability and timeliness is especially interesting as a way to reduce the need for scientific surveys, with their significant recurrent cost implications. SESA should, for instance, work to improve the traditional annual reporting system of MINAGRI, particularly by training field agents in more accurate techniques for estimating production.

5.4 Support to MINFINECO for surveys on production costs of agricultural commodities

Short-term technical assistance focused on particular surveys and a long-term policy advisor are desirable here. They would render more effective the policy-informing process by furnishing information and analyses on those aspects of the rural economy not investigated by MINAGRI or MINIPLAN.

5.5 Long-term participant training

AID-financed projects in Rwanda, including the Agricultural Survey and Analysis Project, have a history of not being able to fill all the training slots which are programmed. This, in turn, jeopardizes the institution-building aspects of projects. To a large extent, this recruitment difficulty is the result of GOR civil service policies which penalize professionals who undertake training programs longer than nine months. If the Agricultural Surveys and Policy Analysis Project is to avoid this problem, a way around it will have to be found, either within AID or as a result of discussions between AID and the GOR.

5.6 Use of the CIC mechanism

The establishment of an integrated data base will be crucial in providing the information needed by the participating services to formulate policy. The CICs for Rural Development and for Economic Policy ultimately will be the users of the analyses coming out of the different ministries. The creation of a new and separate policy coordinating committee would be a redundancy under these circumstances as well as an un-tested entity. By working with an already established mechanism the project increases the likelihood of fulfilling its objectives.

ANNEX E.2 TECHNICAL ANALYSIS

The technical analysis consists of 3 sections: 1) Introduction and Summary; 2) Discussion and Analysis; and 3) Recommendations.

1. INTRODUCTION and SUMMARY

This analysis identifies those socio-economic and agricultural surveys which should be undertaken by the project in order to address the information needs of policy makers and those survey methodologies which should be employed in the collection of data on the rural economy. It also discusses the technical appropriateness of project activities and the means of coordinating them. At this time, some types of surveys can be identified clearly; others, on issues of more immediate importance to policy makers, will need to be identified and undertaken as the need for them arises. The project should retain investigative flexibility in order to respond to issues as they grow in importance and in the choice of methodologies employed for doing so. The former capability is needed so that the immediate concerns of policy makers under particular economic circumstances may be met as they unfold; the latter is a means of refining techniques to reduce statistical error and survey costs. The analyses of collected data should be used to inform decision-makers of the tradeoffs they face in the agricultural policy choices they make. Policy is currently formulated in three GOR agencies which are to be involved in the project: MINAGRI, MINIPLAN, and MINIFINECO. The role of each agency in project activities is developed more completely in the Institutional Analysis (Annex E.1).

Reliable, valid and current agricultural statistics are basic requirements for Rwanda, a country whose economy is fundamentally agricultural. Analyses of agricultural and socio-economic data constitute an input from which decision-makers formulate policy on the agricultural sector. The ASAP established the capability within MINAGRI to collect, assemble, and report agricultural information in an accurate fashion and on a timely basis. There is a need to improve and refine this capability in MINAGRI and the other participating GOR services, however, in order to make more efficient the data collection process. The follow-on project will do this through activities intended to:

- redefine the methodology used by SESA to improve the quality of the data collected and to reduce statistical error and recurrent costs;
- conceptualize the surveys planned to accommodate the information needs of policy-makers;
- train Rwandans in improved data gathering, processing and analysis;
- coordinate and streamline the activities of the various ministries presently gathering and analyzing agricultural and rural economic information;
- improve the GOR's capability to conduct rapid surveys on urgent policy issues; and

- disaggregate data on a regional basis to facilitate GOR assessments of regional agro-economic activity.

2. DISCUSSION and ANALYSIS

There are two principal technical issues confronting the project: the first is concerned with the types and frequencies of surveys to be undertaken and the methodologies to be employed in the collection of data; the second is focused on the division of responsibility among participating agencies for providing current statistics on the rural economy.

2.1 Overview of Surveys and Methodologies to be Undertaken by the Project

2.1.1 Types of Surveys

Although the title of this project makes clear ASPAP's emphasis on agricultural surveys, it is appropriate that the project support other surveys also that provide valuable information on the rural economy. Rwanda's economy, although agriculturally based, is in reality a complex of agricultural and non-agricultural activities. The indicators which index the welfare of rural families are both agricultural and socio-economic.

There will be two types of agricultural and socio-economic surveys supported by the project. General surveys are ones which will be periodic or broad in nature, while special surveys will be more narrowly focused and responsive to a specific, perhaps immediate, need for information.

2.1.1.1 General Agricultural

A system of so-called traditional surveys has been employed by MINAGRI for some time to furnish agricultural statistics at the communal level (and by extension, at the prefectural and national levels). Communal agronomes, reporting to the agronome of the prefecture, provide information on crop and livestock production. Probability surveys, by contrast, of the type conducted under ASAP, identify agricultural practices at the regional and national levels. Some combination of the two is desirable in order to 1) characterize agricultural practices in small geographical areas, at the regional and national levels, and 2) adjust traditional survey estimates.

Currently traditional surveys on crop area planted and production, livestock inventory and slaughter, and prices received by farmers complement the reports produced by SESA. The two together present an annual picture of the state of agriculture at the communal, prefectural, regional, and national levels but constitute two separate sets of agricultural indicators. Statisticians are advised to use all available survey information as well as industry and administrative data to establish a single estimate for each characteristic surveyed. Traditional estimates will need to be reviewed in detail. The wide range of experience and training among communal agronomes will affect differentially their ability to make accurate estimates of crop and livestock production. Adjustments made by statisticians at MINAGRI should be based on the consistency of field estimates in neighboring areas, percentage change from the previous year, and consultation with prefectural officials.

The director of SESA should be charged with reviewing the summaries prepared by the prefectural agronomes to assess their compatibility with the data produced by the probability surveys performed by SESA. The traditional surveys should be continued, as probability surveys for providing reliable estimates of production in small geographical areas (communes) require such a large sample as to make the cost of doing them prohibitive. SESA's unbiased probability surveys should be used to adjust the results of agronome reports to increase their reliability. SESA should continue to train communal agronomes in methods for estimating crop and livestock production to improve the quality of the traditional reports.

Additional information should be collected using the traditional system: data on weekly precipitation, progress of planting, progress of harvesting, and forecasted yield and/or the condition of crops during the growing season. Weekly traditional surveys can provide extremely valuable information on the current agricultural situation with very small expenditures of resources. It is necessary to standardize questions so that the same information is collected at the same time each year. Such a data series can provide an useful current assessment of crop production and an early warning system of crop loss. These weekly reports should be summarized by MINAGRI and released within a few days in order to maximize their utility.

Continuous surveys are needed to obtain current information on agricultural production. They should include data for each season by crop, area planted and harvested, yield, and total production. Annual or seasonal livestock and livestock product production data should be collected as well. The need for reliable, nation-wide information on the full range of agricultural activities was recognized by the GOR when the ASAP was approved in 1981. The 1984 National Survey provided baseline data with generally acceptable sampling errors for most items. The resource requirements and cost of the survey were extremely high, however, and likely beyond the capacity of the GOR to sustain. The provision of a continuous flow of agricultural data and analysis, nonetheless, is fundamental to increasing MINAGRI's access to the policy formulation process. ASPAP should attempt to sustain and improve this information base by experimenting initially with an area frame methodology to improve the quality of the data and reduce sampling error and recurrent costs.

The list frame sample currently used by SESA groups 2,100 surveyed farms into 150 clusters. One hundred fifty enumerators make 200,000 annual household visits. A modified area frame sampling method should increase the precision of survey results by 30%-50%. Some 3,000 households would be grouped into 300-350 clusters. Sampling units would be stratified by land use rather than prefecture. Doubling the number of sampling units, reducing the number of households in each cluster, increasing the geographic distribution of the units, and changing the criteria for stratification will increase the precision and reliability of the results. Forty enumerators should be asked to make 10,000 annual household visits and can be expected to be available for conducting special surveys during the remainder of the year. One supervisor per prefecture is needed to manage the activities of the enumerators.

The area frame would stratify the sample by land use type. This would permit previously excluded forest land, urban areas, and wetlands (marais) to be included in the computation of agricultural production data. The marais constitutes 3.3% of the total land area in Rwanda, 5% of the farm land, and

10% of the area under cultivation. Although only 5% of marais land was used for crop production 15 years ago, the cultivation of the marais has increased rapidly in recent years. If exploited indiscriminately, the marais will become a natural resource tragedy. Wetland agricultural needs to be studied more intensively and monitored by MINAGRI. The area frame sample can accomplish this. The area frame can be kept current by relisting households and selecting new samples every two years.

The methodology of the area frame should be based on the breakdown of the total land area of Rwanda into clearly defined homogeneous land use strata. Strata boundaries are delineated on low altitude aerial photographs and the total land area within each stratum is established with the use of a planimeter. Once the area within each stratum is determined it is possible to design probability random samples using the variables characterizing each stratum. Land use strata that should be considered for future agricultural surveys are:

- 1) Coffee:
Land devoted primarily to coffee production;
- 2) Marais:
all land classified as marais unless classified as type 1;
- 3) Other Agricultural:
the remaining cultivated land, mixed crop land, and cleared land used for crop production or livestock grazing;
- 4) Forest and Non-Agricultural:
land in natural cover which supports little or no agricultural activity; and
- 5) Urban:
all concentrations of populations in towns and cities.

Each land use stratum should be subdivided into count units equal in size to approximately 10 sample segments (identified in aerial photographs and photomosaics). The count unit is used as the basic sampling unit. Randomly selected count units should be divided into sample sub-segments of a such a size that a pair of enumerators traveling together could complete an average of two of them in a day. Low altitude aerial photograph enlargements, 1:5000, should be obtained covering the entire area for the sample sub-segment selected. The sample sub-segment boundaries can then be permanently entered on the photo enlargements. The photos can be used by field staff to account for current land use for all land within the designated sample sub-segment boundaries. A separate questionnaire should be completed for each person operating land inside the sub-segment.

The most recent low altitude aerial photography for Rwanda dates from 1977-1981. A new series should be prepared for the entire country, even if done only once during the life of the project. Comparisons with the older set will reveal changes in land use practices and furnish an important perspective on the evolution of land use in Rwanda.

A test pilot survey using the area frame methodology should be attempted in 1988 with field enumeration of all segments. An assessment of sampling error, survey costs, projected costs of continuing the methodology, and projected costs of performing the survey on a national scale should be made afterward to determine whether the area frame should be employed for the National Agricultural Survey in 1989.

The current agricultural survey obtains information on the use of all land operated by the sample household two times each year. Since farmers do not know the area within each field, sketches have been made of all fields and a sub-sample of them actually measured. It is recommended that all fields be measured instead, and that farmers be asked to estimate the percentage of interplanted fields devoted to each crop. Aerial photographs also will help to identify area in production.

The area sample survey allows delineation of field boundaries within each sample sub-segment to be made. The use of a clear plastic grid for estimating field size has proven to be accurate and more cost efficient than actual field measurements. The pilot survey should test the feasibility of asking farmers in a single survey to report land use both for the current and the previous season.

The current agricultural survey asks sample households to measure the volume of production for principal food crops using a red bucket. The enumerator visits each household two times per week throughout the year to collect information on the number of buckets harvested for each crop. A majority of households now maintain these records themselves; fewer enumerator visits therefore should be needed in the future. This approach should be tested as a means of reducing the field work load.

The pilot survey should test alternatives for estimating crop production. Currently each enumerator makes 104 annual visits to each household. Although this regular contact between farmers and enumerators represents a potentially strong extension relationship, it is costly and time-consuming and would not be necessary under the area frame method. The area frame would reduce variance on area under cultivation and sub-samples of 100-150 farms would be sufficient for estimating production using crop-cutting or farmer-measured harvested yields. If successful, less field enumeration will reduce recurrent costs.

A true test of farmer-reported yields is needed and SESA should undertake it. Although individual estimates of yield are usually inaccurate, the errors tend mostly to be compensating. Aggregate or average yields often prove to be reliable.

Currently enumerators collect pre-harvest crop estimates once each season, about 6 weeks before the harvest. Farmers are asked to compare the current season's production with that of the same season the previous year. When the previous year is unusual the comparison is rendered less meaningful. A better question asks the farmer to compare the current anticipated yield to a normal or average yield. Such an approach has been successful in other developing countries and should be tried in Rwanda.

Yield projections by other individuals knowledgeable about the agricultural sector, such as extension agents and agronomes, likewise have been successfully used in other countries. They can provide information on the progress of planting and harvesting as well. These data provide some early warning of potential crop production problems due to late planting or delayed harvest. Training agronomes to make better estimates is an activity the project should continue as one means of improving the crop forecasting system.

SESA has begun a program to collect prices received for two crops, beans and sorghum, as part of the semi-weekly agricultural survey. At the present time food prices are collected by a number of government and private organizations. Following an analysis of various price services SESA should sponsor a meeting of the relevant organizations to design a single survey which would meet the needs of all the groups and eliminate costly and time-consuming duplication of effort.

Once every five years detailed surveys, such as the current semi-weekly production survey or an agricultural census, will be needed as a check against other means of collecting crop yield data.

2.1.1.2 Special Agricultural

Establishing a crop forecasting system is a high priority of the GOR. SESA already has experimented with several methodologies. During the drought of 1984, SESA collected, processed, analyzed and reported pre-harvest crop production estimates in a period of six weeks. The capability to conduct such rapid surveys on key policy issues in the agricultural sector is an important means of increasing access to the policy formulation process. Special studies also can help evaluate project or MINAGRI extension themes. Other special agricultural surveys should investigate the impact of pricing policies on the production of key cash/export crops, such as coffee, sugar, rice, and potatoes; the use and planned use of land in wetlands (marais) and forests; pricing and marketing of major food crops; and other issues to be identified as changing agro-economic conditions define their importance. The current food security survey being conducted by SESA is an example of this genre, investigating sales and purchases of beans and sorghum at the farm level.

2.1.1.3 General Socio-Economic

MINIPLAN's Household Budget and Consumption Survey, currently processed and analyzed with AID technical assistance and funding from PRIME, is a virtual storehouse of information on rural (and to a lesser degree urban) household economies and economic behavior. Continued support to this activity is needed in order to 1) verify practices and patterns revealed in the initial analysis, 2) pursue further investigations of relationships revealed as significant in the initial analysis, and 3) monitor the evolution of the rural economic adjustment process at the household level.

MINIPLAN first conducted a detailed household survey in 1983, in which 450 of the 1,200 total households sampled were the same as those included in the sample for the 1983 pilot agricultural survey. The richness of this data

set currently is revealing expenditures and purchases by item and member of the household for the 270 households visited daily during four two-week periods throughout the year. The analysis of individual household and agricultural production data for the 450 households common to both samples, to be undertaken shortly, will furnish a view of household production and expenditure unique in Africa. This integrated data set will demonstrate how production, income and expenditures vary in terms of one another. Analysis of the impact of increased agricultural production upon the rural economy will help policy makers to anticipate the socio-economic consequences of the policy decisions they make. This analytical effort will continue under ASAP until it includes the entire sample and the surveys done recently in urban areas. This activity should be supported by ASPAP, with additional surveys planned for 1988 to keep the data current.

2.1.1.4 Special Socio-Economic

The Farming Systems Improvement Project and other projects of this genre currently are the only sources of farm management information in Rwanda. Selected pilot farm management surveys on agricultural production costs, yields, and returns to the use of inputs performed for major food crops can be a means of verifying the analyses produced by FSIP and identifying the distribution of intra-household agro-economic behavior patterns disaggregated by significant agricultural, geographical, and socio-economic (including gender) variables.

Investigations of production practices, input requirements and input-output relationships should be collected to supplement farm management information being produced by farming systems projects. These investigations will supplement as well the cost of production data produced by MINIFINECO. If satisfactory arrangements for access to these latter data cannot be made, or if such data prove to be unsuitable, ASPAP should undertake special surveys for the collection of farm management/cost data or make such collection a part of the continuing series.

Except for the information collected as part of the regular series on prices paid and received by farmers, marketing data should be collected in special surveys. The importance of coffee as the principal earner of foreign exchange and, to a lesser degree, as a cash crop for farmers should place it first on the list of marketing studies to be undertaken. Information should be collected on prices received from exporters, reported prices in foreign markets, costs incurred in marketing, distribution of the marketing margin, distribution of volume sold between quota and non-quota sales and among consuming countries, and market structure and organization. As farm products other than coffee are marketed in limited quantities, problems related to marketing them are unlikely to have as major an impact on the development of the sector. As a result, surveys of these activities should be assigned a lower priority. Data collected for these commodities generally will parallel those for coffee. Spatial and temporal consistency of price movements should be determined and used as indicators of market efficiency. Comparative analyses of marketing margins and costs likewise should be used as indicators of market efficiency. Short-run price and income elasticities can be calculated from an historical series but will require a minimum of about 10 seasons' data.

Surveys of off-farm employment and rural enterprise development are needed to monitor the effect of policy change in the non-agricultural sector of the rural economy. Experience with the PRIME indicates that such assessments should be performed in order to give policy-makers a more complete picture of the economy and to inform them of the micro-economic impact of macro policies.

2.1.2 Frequency of Surveys

2.1.2.1 General Agricultural

Currently agricultural surveys are conducted year-round, focusing on the two principal harvest seasons (December-January and May-June) and dry-season production (June-August). A national agricultural survey, last completed in 1984, should be contemplated again for 1989/1990. It is the basic method of revealing the current state of agricultural land use and production and the changing state of agriculture over time. National surveys, whose utility must be weighed against the fact that they are costly to undertake, should consequently be designed to reduce initial and recurrent costs.

2.1.2.2 Special Agricultural

Pre-harvest crop forecasting estimates are collected once during each growing season at present. More frequent collection would increase the value of the estimates by making them more a reflection of prevailing conditions. The project should retain resources and flexibility to perform other special agricultural surveys as they are needed.

2.1.2.3 General Socio-Economic

The processing and analysis of the Household Budget and Consumption Survey is on-going. Additional survey activity should be undertaken by MINIPLAN in order to record the impact of policy change at the household level.

2.1.2.4 Special Socio-Economic

The project should take a flexible approach in planning annual activities in order to respond to the information needs of policy makers and others as these arise each year. Although the frequency of these surveys cannot be specified at this time, funds should be budgeted to permit both MINIPLAN and MINIFINECO each to undertake on the average one special survey for each year of project activity.

2.1.3 Sampling

The list frame was used to identify household clusters in the sample for the 1984 national survey. 150 clusters constituted the sample. Although the number of surveyed households, 2,100, was at a statistically acceptable level, their clustering reduced the representativeness of the survey on the whole. It is likely that an area frame sample would be more capable of representing the entire population, grouped into 300-350 segments, and perhaps would provide efficient probability sampling for 15 to 20 years without up-dating. List frames are up-dated each time they are used, a costly and time-consuming procedure, and the quality of data they provide is less precise than those obtained using the area frame.

The samples selected for other surveys could be sub-samples of the population census, the national agricultural survey, the household budget and consumption survey, the fertility survey, or newly defined for the needs of the survey in question. Samples should be selected and tested according to the criteria of cost-effectiveness and statistical validity, with the goal of reducing both costs and statistical error.

2.1.4 Staffing

Consultant staff will be needed to help GOR agencies design the basic surveys, and process and present the data; analyze the data; advise on the policy implications of the analysis; develop agricultural plans; define special surveys; and identify short term consultancy needs and the candidates to meet them. Technical assistance should be provided all the participating agencies through an institutional contract in order to permit the proper phasing of long and short term consultancy services to take place.

Long-term technical assistance is needed to carry out the collection, assembly and analysis of the SESA series and other on-going activities. Short term visits by statistical and analytical specialists should be directed more at specific issues. An institutional contract can fill these slots more quickly and effectively than can AID through personal services contracts.

Within 3-6 months after the institutional contractor is recruited, a team composed of an area frame specialist and a survey or mathematical statistician should assist SESA in designing the area frame sample, should this prove to be the most feasible approach. In collaboration with Rwandan counterparts the team should construct the sample for the pilot survey to cover one season's activities in 3 prefectures; design an appropriate questionnaire and train enumerators in its administration; and advise and assist in applying SASS and other software to process the data. The team also should advise and assist Rwandan staff in modifying and strengthening the methodology developed for the agricultural survey under ASAP. This survey should be continued through the pilot test phase of ASPAP in order to maintain a continuous agricultural data series. After completion of the pilot phase, procedures and methodologies for conducting the sample frame surveys should be reviewed and modified as required. At that time a decision should be made on whether or not the area frame will be used exclusively for future surveys, and if so the extent of overlap needed with the list frame survey in order to merge the two into a single continuous series. If the area frame is not to be used again, the team should assist SESA in improving the list frame methodology (which will also be used for the population census).

A resident analyst should assist in the development of agricultural plans and policy formulation; short-term analysts should be recruited for special problems or the special economic concerns identified by GOR policy makers. The resident should be an agricultural economist with expertise in quantitative methods and linear programming. He/she should be responsible for identifying the short-term expertise needed by SESA and the other agencies and can help to recruit candidates for special studies.

Training of local staff to upgrade skills, given their already considerable experience, should take place on the job and through academic programs. Short courses in the U.S. or neighboring African countries can be used to supplement in-country work experience. Long-term graduate level

training in the U.S. should focus on the economics of agricultural production, marketing/price analysis, household socio-economic dynamics, and statistics. There has been one major training problem encountered before by OAR/R: an insufficient number of acceptable candidates have been identified for long term training. This phenomenon should be addressed with the participating agencies in order to extract from them stronger commitments to identifying individuals for training and permitting them release time to study English.

On-the-job training should be the major component of the non-academic training program. Short-term and resident specialists would work directly with Rwandan counterparts. Such training is critical if Rwandans are to be able to effectively take over project activities. Trainees should be provided the chance to take short courses in specialised areas in either the U.S. or in neighboring African countries. Opportunities for short-term agricultural policy studies should be provided officials in the MINAGRI, MINIPLAN, and MINIFINECO. Among the courses offered by U.S.D.A. and proposed for this kind of training are "Basic Agricultural Survey Statistics and Methods," and "Establishing Data Bases and Analytical Systems for Economic Decision-Making in Agriculture." The first course would be useful before the pilot survey is conducted.

Candidates for Master's level graduate training should be recruited during the first year of project activity. It is desirable for them first to gain some experience on-the-job before assuming long-term training and then to complete their studies and return to the project while consultant specialists are still in-country. The Ministry of Agriculture, MINIPLAN, and MINIFINECO should be required to provide candidates in each of the four essential project positions - agricultural economics, marketing/price analysis, household socio-economic dynamics, computer science and statistics.

Local staff, vehicle, and other commodity requirements for the surveys will depend on the kinds of surveys undertaken and the methodologies which are employed. Many of these surveys will be identified only as ASPAP progresses. Officials in participating GOR agencies responsible for designing surveys should, with assistance from project-funded technical advisors, analyse the costs and feasibility of various methodologies so that priority informational needs can be met within GOR resource limitations.

For example, whether or not an area sample frame is substituted for a list frame in the next national agricultural sample census could have profound implications for enumerator and vehicle requirements. Using a list frame, the 1984 national survey required a high of 150 enumerators. The area frame method could reduce the enumerator staff to 40. On the other hand, the area frame may require as many as 11 vehicles and drivers stationed in the prefectures, which could be problematic. Hence, a pilot survey will be critical for addressing logistical questions and the project will turn largely to the institutional contractor's expertise in survey design for devising a methodology that is feasible and can eventually be carried on by the GOR without outside assistance.

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3. Policy

Much agricultural pricing policy is made by elements outside the MINAGRI, such as the Interministerial Coordinating Committees for Economic Policy, chaired by MINIFINECO, and for Rural Development, chaired by MINAGRI. Members of these Committees include representatives of MINIFINECO, MINIPLAN, MINIMART and MINAGRI.

By establishing and maintaining an integrated data base on the rural economy ASPAP should increase the impact of MINAGRI on the policy formulation process. By developing the capacity to analyze and present the most important elements of this data base, ASPAP should render the participating services more capable of communicating to policy makers the key interactions and causal relationships in the rural economy. By identifying key agricultural policy issues to be investigated in special surveys, ASPAP should enable policy makers to understand better the socio-economic consequences of the decisions they make.

Collaboration among the actors in the policy formulation process should be promoted actively. A Project Technical Group, composed of representatives of each participating ministry, should be formed to streamline and facilitate data collection and forward survey analyses to policy-makers and others. This mechanism is discussed further in the Institutional Analysis. The implication of an integrated data base from which analysis is drawn and policy is formulated is that the rural economy will be in the same way a known entity to each policy-making agency and susceptible to differential analysis according to the mandates of these bodies.

The improved capability of the GOR to plan and manage the development of the rural sector will be witnessed over a period of years. Production data from repetitive surveys are the basis for continuously monitoring progress in the agricultural sector. Trends in productivity, overall or for individual crops or livestock enterprises, should be calculated to identify problem areas to be addressed by policy analysis and/or biological research programs. The survey series will permit a continual appraisal to be made of the adequacy of food supplies and, if special surveys of crop conditions are undertaken because of serious fluctuations in rainfall, signal the need to initiate emergency food programs. When an historical series on production and prices is available, long-run supply elasticities will be able to be calculated to plan better the agricultural economy.

By furnishing regular and reliable agricultural production data, SESA will make MINAGRI's agricultural work plans more realistic. With the capability to undertake special surveys on a timely basis, the unit will increasingly perform an assessment role for MINAGRI. The impact of SESA on the formulation of agricultural policy in MINAGRI, already considerable, will increase under ASPAP.

The farm management/production cost data, developed partially or wholly as a part of this series, should serve to augment the data collected by farming systems projects under the direction of ISAR. If these data are to be incorporated into the national information system, arrangements must be made for the use of uniform schedules and collection procedures that will provide comparable data from different sources. Farm management data will provide a basis for calculating the input-output coefficients required for linear

programming analyses. This analytical tool, which should be used by the project, permits calculation to be made of optimal farming or policy problems and is a powerful analytical tool for carrying out planning and policy formulation functions.

The data from the Household Budget and Consumption Survey are essential for estimating short and long-run macro elasticities. They may be used as well in estimating short run macro parameters until the long term historical series is developed. Since cross section data are available to estimate such parameters, arrangements must be made to secure data for individual households. Aggregated data on consumption patterns would provide the basis for estimating current and projected demands for individual food items. Because of the difficulty and expense of conducting this type of survey, it is unlikely that another of this scale will be carried out in the near future. Fortunately such parameters change slowly and measures developed from existing data can be used for several years. Developing the means of gaining access to these data must be assigned the highest priority.

MINIFINECO's use of current agricultural statistics in the policy formulation process should be supported by means of increasing their knowledge of the content of the analyses performed by MINAGRI and MINIPLAN. A series of seminars and workshops should be held regularly so that the needs of policy makers and the data and analyses furnished to them can be made compatible.

4. RECOMMENDATIONS

4.1. Surveys

4.1.1 The collection of data by the traditional method should be continued. SESA should help to refine this methodology to increase its accuracy.

4.1.2 Communal agronomes should receive training from SESA in order to improve their capability to estimate crop and livestock production for traditional surveys and crop forecasting.

4.1.3 General agricultural data on production and land use should continue to be collected on a regular basis.

4.1.4 The current means of collecting data should be continued until a more accurate and less costly means is identified. ASPAP should test an area frame methodology in 1988 and assess its performance relative to the current list frame.

4.1.5 If the pilot survey conducted in 1988 using the area frame sample proves to provide more accurate information and reduce costs, it should be used for doing the regular and national agricultural surveys.

4.1.6 A national agricultural survey should be undertaken in 1989/1990 using either the area frame sample or the list frame sample, depending upon the assessment made by SESA, the institutional contractor, and OAR/R after completion of the pilot survey.

4.1.7 New aerial photographs should be sought for the area sample frame and for land use inventories needed to stratify the agricultural survey sample.

4.1.8 A number of special agricultural surveys should be undertaken. Among other things, they should focus on crop forecasting, planned land use in forests and marais, the influence of pricing policies on cash/export crops, pricing and marketing of major food crops and the impact of regional extension themes.

4.1.9 Continued support should be given to MINIPLAN for completion of the analysis of the Household Budget and Consumption Survey data.

4.1.10 Special socio-economic surveys should be undertaken on topics of importance to researchers and policy makers, such as farm management, off-farm employment, and marketing.

4.1.11 A single format food price survey should be designed for use by various governmental and private organizations.

4.2 Staffing and Training

4.2.1 An enumerator staff of 40 and 10 supervisors is needed to do the national agricultural survey; one-half that number should be used for the pilot survey.

4.2.2 A short-term area frame specialist and survey or mathematical statistician is needed for the pilot survey. He/she should make a recommendation on the need for further short term expertise.

4.2.3 A resident analyst is needed to assist in developing agricultural plans and formulating policy. He/she should recommend special studies to be undertaken and short term consultancy requirements. This advisor should be an agricultural economist with expertise in quantitative methods and linear programming.

4.2.4 On-the-job training is needed for SESA staff, with possibilities for short term training in Africa or the U.S. For officials of the MINAGRI, MINIPLAN, and MINIFINECO, training opportunities should be provided in agricultural policy studies, survey design and statistics.

4.2.5 Long term training at the Master's level should be provided in the fields of agricultural economics, marketing studies, micro socio-economic dynamics, computer science, and statistics. Candidates should be nominated by MINAGRI, MINIPLAN, and MINIFINECO.

4.3 Policy

4.3.1 Policy should be informed by transmitting to policy-makers the results of data collected and analysed on the rural economy. This includes, but is not limited to, studies on agricultural production, crop forecasting, pricing, marketing, farm management, employment, and topics of special and urgent interest.

4.3.2 MINIPLAN should continue to receive support for the analysis of the Household Budget and Consumption Survey. Their capacity to use micro level data in the formulation of macro economic policy should be enhanced through technical assistance for policy analysis.

4.3.3 Representatives of the participating Ministries should constitute a Project Technical Group to discuss surveys, methodologies, and results, review work plans, organize seminars and workshops, and generally streamline and facilitate the data collection process. The results of current survey and research activity should be presented and discussed in this forum and then presented to the CICs for Economic Policy and Rural Development.

ANNEX E.3 SOCIAL ANALYSIS

1. INTRODUCTION

The soundness variables - feasibility, participation, beneficiary incidence - ordinarily used to assess project impact upon "target" populations and others are in this case applied to a number of aggregates which only in some instances can be properly viewed as target groups. Policy-makers, for example, are not actually participants in project activities but may be viewed roughly as a target insofar as policy reform important for rural development is seen as a derivative of the extent to which policy-makers are influenced by analyses furnished by the project. Similarly there are many individuals who will be involved in implementing project activities - statisticians, programmers, economists, enumerators and their supervisors, and so on - who do not constitute a group for purposes of assessing impact, for they have little in common other than their membership in institutions participating in the project, but upon whom as individuals the project is expected to have a profound effect. Then there are farm families who are expected to profit from policies which the project will promote through analyses of the rural economy. They will be beneficiaries of policy reform and as such are properly spoken of as a target, although identifying them simply as "farm families" disguises the differences among them. As a result, the rural population should be disaggregated into groups according to activity and gender, affected differently by particular policies, in order to render them a less inclusive and amorphous entity.

Under these circumstances it is advisable to more or less abandon the strict target group concept and assess instead soundness variables in terms of project goals and the means of meeting them, and the ways in which individuals, women and men, in the rural economy are most likely to be influenced by policy reform in their roles as farmers, traders, entrepreneurs and so forth.

This analysis consists of the following sections.

1. Introduction
2. The Rwandan Setting
3. Participation
4. Project Feasibility
5. Beneficiaries
6. Impact
7. Recommendations

2. THE RWANDAN SETTING

In an economy as fundamentally agricultural as Rwanda's, where more than 85% of exports are derived from agricultural activities and from which over 90% of the population earns its livelihood, donor support for improved agricultural production should affect in a positive way the lives of many people. Yet the parameters of socio-economic health depict a disturbing

reality: the largest unemployed segment of the population is the 15-24 age group, which constitutes 22% of the population and 36% of the work force; there is no longer room for all of them in farming. They represent over 30% of the unemployed in Rwanda. Between 1978 and 1983, the number of individuals in this cohort increased by 117,300, while the GOR's third five year plan for the same period called for the creation of only 85,000 new jobs outside of agriculture. Urban population is increasing at an annual rate of more than 9% (overall rate of population growth is 3.7%). Ninety-eight percent of the population have not had more than a primary education and the illiteracy rate is estimated still at over 60%.

With regard to the land base, fragmentation is reducing the production potential of agriculture. Although the average farm size in Rwanda is 1.1 Ha, this misleading parameter disguises the fact that 57% of the population on farms smaller than 1 Ha. in size occupy less than 25% of the total farmland in the country. Over-exploitation of land has caused serious soil deterioration. Reduced yields make it less likely each passing year that the land will support a population which continues to grow at a rate of 3.7% per year. The recognition of this worsening condition is notable among Rwandan farmers: they invest in buildings, not agricultural production; they finance post-primary education in the hope their children will find a job outside of agriculture.

All this speaks of one thing: agriculture is no longer capable, in its current state, of providing a livelihood for the increasing rural population nor is it sufficiently productive to support an expanding market-dependent population (the percentage of GDP derived from agriculture decreased from 53% in 1974 to 40% in 1983), while relatively few individuals possess other employable skills to help them find work off the farm. The policy reforms which OAR/R is promoting through the PRIME in collaboration with the GOR to increase incentives to farmers and entrepreneurs are meant to make farming more profitable and permanent salaried employment more prevalent in rural areas. Support to agricultural research is meant to make farming more productive. This project will provide data and analyses which will permit policy-makers to understand the trade-offs they face in the policy choices they make, grounding policy in what is known to be true about the rural economy. Short of proceeding in this rigorous manner and making necessary policy changes it is difficult to imagine how Rwanda will accommodate the growing need for the productive employment and sustenance of the population.

Rwanda is not about to abandon its marriage to agriculture. The productivity of the land and the people are the country's greatest natural resources. Industrial development will be linked to agriculture in the form both of production of inputs and processing of commodities. Policy dialogue to relax restrictions on agricultural exports currently is on the AID-GOR working agenda. The development of wetlands will be studied; they can no longer be exploited haphazardly. Agroforestry research to improve soil fertility and increase agricultural production will be undertaken in earnest through the collaboration of ICRAF and ISAR. Farming systems research, under ISAR's direction, continues around the country. Developing Rwanda's agricultural resource base is the most fundamental of themes guiding the

government's strategy as outlined in the impending Five Year Plan (beginning in January, 1987). Its realization in an expanding rural economy is a function of technological know-how and policies which make it profitable.

3. PARTICIPATION

The soundness of a project is judged in part by the extent of host country participation in its implementation. In this instance, aside from a limited number of expatriate advisors, the project will be implemented exclusively by Rwandans. Perhaps it is a more meaningful indicator to consider the extent to which Rwandans have participated in the design of the project, as fundamental policy-informing objectives would be rendered nearly useless if appropriate mechanisms, that is, realistic in terms of the GOR policy making process, were not identified for reaching policy makers.

Dialogue with MINAGRI, MINIPLAN, and MINIFINECO has been a regular feature of the design activity. The director of SESA has helped to conceptualize the role of that unit in the project, particularly its relationship to the Directions Generales within the MINAGRI, and more broadly in its capacity to help develop and assess work plans within the Ministry. The Director also has defined the personnel and training needs of the unit. His invaluable advice on how to proceed in design activities has been of considerable importance in moving forward this institutionally complex project.

The Secretary General of MINAGRI has confirmed that the role of SESA in planning and monitoring will be crucial to the preparation of agricultural policy within the Ministry. He has supported the plan for inter-ministerial collaboration which the project will implement in the form of the Project Technical Group.

Discussions with MINIPLAN have been focused on the needs of the Ministry for technical assistance and equipment in order for it to undertake those surveys assigned to it under its mandate. Both the Director of the Bureau of Statistics and the Director of the Bureau of Plan have worked with AID to determine where project activities would be most effective within the Ministry.

The Director General of Economy (MINIFINECO) has participated in the design by reviewing a "position paper" which OAR/R submitted to each potential participant in the project, responding to it as did the others with positions of his own. This paper described in draft form conceptual and methodological issues the project planned to address. Each potential participant had the opportunity to review the overall goal of the project, the activities which constituted it, and the previewed nature of their own involvement. In their responses they indicated where they were and were not in agreement with the proposals. Subsequent discussions between OAR/R and each service, based on these papers, established GOR priorities and the exact nature of the participation of each service. MINIFINECO, which chairs the CIC for Economic Policy, was particularly responsive to proposed project activities. They perceive a need for greater coordination among data collecting services in order to prepare policy statements and have requested OAR/R assistance in

establishing a working group to facilitate this. The Project Technical Group will serve this function and thus should have an inside track in reaching policy-makers.

In each of these instances the participating agencies have described their needs for technical assistance, training and equipment; have identified the nature and magnitude of their own contribution; and have presented programming plans for management and resource utilization. During implementation GOR technicians and policy-makers should define further project activities, e.g. which new studies will be done, through the work plan and technical group mechanisms.

On another level, purely local participation in project activities will be largely a function of the selection of the sample/sub-samples for the various surveys to be undertaken. This type of participation has an important learning component to it, as evidenced by the phase I Agricultural Survey activity. Not only were enumerators easily received by participating families, but field site visits by OAR/R staff confirmed that farmers were learning to keep production records themselves. The measurements of agricultural production and related activities inform participant farmers, probably for the first time in a measured way, of the productiveness of their farming systems. Measurements made over time should reveal to them patterns or habits of agricultural activity of which they have not been aware, but of which they should be. Changes in agricultural policy will make more sense to farmers once they can see what the impacts will be upon their own production systems. Farmer cooperation was an important factor in producing high quality data in ASAP. Local participation in ASPAP thus will be considerable - the last national sample included 2,100 households.

4. FEASIBILITY

There are a number of proposed activities and institutional arrangements which must operate successfully for the project to achieve its goal of informing policy. At the highest level, it is the Inter-Ministerial Coordination Committees (CIC) for Economic Policy and Rural Development which are expected to incorporate into their decisions the analyses of the rural economy furnished them by the different ministries. These analyses and their policy implications should be assessed first by a Commission Mixte, an already extant body composed of representatives of MINAGRI, MINIPLAN, MINIFINECO, MINIMART, the BNR, the BRD, and USAID and serving to coordinate the activities of the PRIME, and then forwarded to the CIC for Economic Policy. On another level, the Project Technical Group, composed of representatives of the participating agencies - MINAGRI, MINIPLAN, and MINIFINECO, and USAID, should be asked to review project activities and work plans and inform the Commission and CICs of studies and their results. Management of day-to-day activities should be the responsibility of the different agencies participating in the project. Working within the existing GOR framework should enable the project to profit from a policy formulation process already in place and operational.

In the Institutional Analysis the strengths and needs of the agencies participating in the project were discussed. In section 2 of this analysis the extent of Rwandan participation in the design exercise was described. By

focusing the project on those activities which Rwandans themselves perceive to be of priority and which OAR/R assesses as realistic in terms of its objectives and the capabilities of the participants, the feasibility of project activities, as described below, is promoted.

The role of SESA in the planning and evaluation activities of MINAGRI already is considerable. Given the new orientation which the Ministry is undertaking that role will increase. Under the terms of a major reorganization, MINAGRI will attempt to focus donor assistance on clearly defined and delimited projects. They will need to identify with precision the kinds of support they will seek from the donor community. Once these projects are in place the Ministry will need to assess their performance in order to ascertain again the state of agricultural development in the country, region by region, and the additional support required. SESA has been asked to assume a major role in this program both by helping to identify areas of intervention and by monitoring project performance. Currently, in addition to providing the most accurate and current statistics on agriculture in Rwanda, SESA reviews the work plans submitted by the different Directions Generales to help make them realistic in terms of what is known about the agricultural sector, and evaluates performance in terms of the extent to which the plans are realized. MINAGRI intends to have SESA participate more broadly in the process of assessing needs, identifying projects to address them, and subsequently monitoring their performance. Project support to increase SESA's data collection and analysis capability is essential to enable it to perform effectively its new role and to advise policy-makers in the MINAGRI.

OAR/R and SESA already have developed good working relationships with MINIPLAN and MINIFINECO. Support to MINIPLAN currently takes the form of technical assistance and computer equipment for the analysis of the Household Budget and Consumption Survey. Collaboration with MINIFINECO is largely through the PRIME. Working relationships with these Ministries are excellent and should be strengthened by additional technical support under the project. The feasibility of working with these agencies is not in question. They are actively seeking additional collaboration with AID; they come often of their own volition to the AID office.

The feasibility of completing the studies planned by SESA appears sound given the unit's experience in the first phase of the project, although an obstacle to valid survey implementation has surfaced in the past year. Enumerators have become more skilled at falsifying responses as they become more experienced and know better what "realistic" responses are likely to be. As the questionnaires change there is a lag time before enumerators are able to know enough to recommence their fantasy responses, but ultimately the problem arises again. Better supervision from regional supervisors can help to reduce the magnitude of the problem, but the preoccupation of these latter individuals with indemnities and personal vehicles often renders them less than willing to assume responsibility for guarding the rigorous methodology the survey effort requires. The pilot phase of the next national survey will employ a new methodology and consequently non-sampling error of this type initially should not be a significant factor in tabulating the results. The next national survey, whether using the new area frame or the list frame sample used previously, will vary the composition of the sample by 20% each

year. The project Direction will have a basis for comparing current responses to previous ones to judge the work of the enumerator while at the same time introducing new responses into the program to defeat the familiarity factor. If this does not prove to be a sufficient means of discouraging falsification the project will necessarily have to consider other means, such as re-training enumerators or replacing the most contemptuous of them.

The unit has retained its personnel both in the data processing center and in the field. There were essentially no problems with farm families during the first national survey (only three farmers refused to be interviewed) and no reason to expect any for planned surveys. A more serious feasibility issue involves the use of vehicles in those prefectures where the pilot survey will be undertaken (and if successful, in all prefectures) to take teams of enumerators around the countryside. Vehicles based outside Kigali and not subject to strict supervision are notoriously misused. Although this problem is generic in developing countries, it is particularly problematical for this project. Data must be collected during specific and limited periods of time, i.e. an agricultural season; a vehicle-based data collection methodology will be vulnerable to breakdown, wrecking statistical havoc with the sample. A survey methodology which so heavily depends upon vehicles will require of the project explicit policies on vehicle use and maintenance and rigorous supervision. It would probably be better to use motorcycles to transport enumerators to households.

A major feasibility question can be asked of policy-makers: is there a need for studies and analyses of the rural economy? Discussions in MINIFINECO indicate that the results of surveys undertaken by MINAGRI and MINIPLAN are needed for the formulation of economic policy, but that coordination among the three Ministries has been lacking. Thus the need of MINIFINECO for specific information at specific times has not been fulfilled. By improving both coordination among the Ministries and the quality of the products they offer, it is expected that policy-makers at the CIC level will be reached. Regardless of how this process operates, it should be monitored so that assessments of impact can be made. Additional means of increasing demand among policy-makers for analytical reports are the timely publication of study results and periodic seminars in which they are discussed. This will offer policy-makers clear opportunities to provide feedback and indicate how reports can be made more useful in the future, especially in terms of subject matter, presentation and timeliness. The project can increase the demand for its services by making the public more aware of the quality of what it has to offer. American backing in this effort is positively viewed in Rwanda. The comparative advantage the U.S. is perceived to have in statistical analysis, computer technology, and institutional expertise already has predisposed policy makers to anticipate a successful effort. In a recent report produced by the Belgian Cooperation, SESA is said to have compiled the surest agricultural statistics in sub-Saharan Africa. In this next phase of activity, it will be more the uses to which the data are applied which will be the standard by which the success of the unit is judged.

5. BENEFICIARIES

There are basically two categories of benefits which will come out of project activities: direct, in the form of improved capabilities at MINAGRI,

MINIPLAN, and MINIFINECU as a result of on-the-job and other training provided Rwandans; and indirect, in the form of an improved climate for agricultural and rural enterprise investment. The latter type is potentially much more extensive in terms of the numbers of individuals who will be affected by policy reform. It is the former type which will exhibit the most quickly and in a measurable way the positive effect of participation in the project.

There are technical assistance components in each sphere of project activity. Rwandan counterpart and support staff working with expatriate advisors will undergo considerable on-the-job training and be eligible for long and short term courses in other countries. These are the individuals who will be expected to assume responsibility for much of the data entry and processing activities. Longer training is planned for individuals in statistics, economics and other social sciences as prospective senior staff for participating GOR agencies, especially SESA. It is reasonable to expect that senior policy makers also will benefit from their exposure to rigorous analyses based upon hard data.

Benefits of the indirect type are more difficult to identify. Rwanda's farm population is involved in a complex tangle of subsistence and commercial activity. Analysis to date of the Household Budget and Consumption Survey reveals that 10-15% of farm households are involved in major commercial transactions regularly, supporting what has been said to be true about some farmers: that is, they hire labor and they themselves concentrate on commerce. At the other end of this spectrum, it appears that more than 75% of households are involved in commercial transactions of one sort or another on a smaller scale. Although the study of the extent of market orientation among farmers continues through SESA and HBCS efforts, it appears at this time that an intelligent price incentive policy would act as a stimulant to production. The extent to which some individuals will profit disproportionately from such a policy is harder to say; farmers who can skillfully manage their systems are the ones most likely to profit from price incentives and other favorable policy, all other things being equal. By monitoring impact the project can assess beneficiary incidence resulting from pricing policy.

The percentage of farmers involved in large commercial transactions roughly corresponds to the figures provided by SESA for that small group of farmers responsible for disproportionately high agricultural production. 16% of the farms in Rwanda occupy 43% of the total area in farmland; on the other end, 57% of the farms occupy no more than 25% of total farmland. Their contribution to production is correspondingly proportional. Is there then a small, relatively better-off elite who would profit more from policy favorable to agriculture? This is precisely the sort of hypothesis which should be investigated in the ASPAP activity. Private sector marketing is the direction in which the GOR is moving, although at present the GOR plays a major role in marketing through parastatals. In working more with the private sector the GOR will need to know whom they are trying to help: the average farmer? the wealthy farmer? the cooperatives? The data collection and analysis efforts of SESA and MINIPLAN can inform policy makers of the tradeoffs they face in the decisions they make and clarify whom the beneficiaries of policy reform will be.

Two other policy issues likewise can serve to illustrate the complex relationship between policy, agricultural practice, and beneficiary incidence. The haphazard development of wetlands (marais) is proceeding at an alarming rate. Currently it is the bourgemestre who authorizes access to the marais. Allocation of marais parcels has significant land tenure, income, and political implications. Benefits accruing to individual members of the rural population will be a function largely of the policy governing marais development. Studies of wetland management will soon be undertaken by ISAR with AID technical assistance. The identification of beneficiaries and the potential costs and benefits of reform will be inevitable features of this research and should inform the policy formulation process.

Regulations governing exports are presently under review by the GOR. The major export of Rwanda is coffee, accounting for 65% of export earnings. More than 50% of Rwandan rural households grow coffee. Policy relaxing restrictions on exports will benefit coffee production and those farm families capable of profiting from it in their management decisions. Fewer households (27%) grow potatoes. There is a considerable demand for Rwandan potatoes in central Africa, with a kilo in Brazzaville selling for 20 times the price in Kigali. Relaxed restrictions on potato export will profit farmers capable of increasing their potato production and with access to roads. At present the rugged terrain of Ruhengeri prefecture has constrained the marketing of potatoes there. Clearly some farmers will be more capable and more resourceful in responding to a policy of export reform. SESA's monitoring of this policy change if and when it occurs will reveal a beneficiary incidence which now would be illusory to identify.

The identification of beneficiaries indirectly affected by the project through policy reform should be an evolving phenomenon. It is premature to cite them in the absence of the analyses which will be produced in the framework of the project. Activities which are so explicitly focused on measurement and analysis are well-suited for monitoring this process, as discussed in the next section.

6. IMPACT

The studies which are planned or contemplated under this project are meant to make available information on what is happening in the rural sector and what that means. Policies formulated on this basis will be informed. Measurements of the consequences of policy change will provide feedback to policy makers, revealing the need for further policy adjustments in accordance with the development priorities set by the GOR. The entire project is designed to assess and measure impact.

Baseline information which will permit assessments of social impact is already being collected through both the Agricultural Survey and the Household Budget and Consumption Survey. Currently these involve the disaggregation of data by member of the household. Thus we can locate figures for the percentage of women who are heads of households and involved in agricultural production by crop, agro-ecological region, prefecture, level of education, age, and literacy, and a large number of production variables. We have

figures which break down agricultural activity by crop, household member, prefecture, region, and geographical zone. Data from the HBCS, still being processed, will shortly permit us to know additionally the economic transactions in which household members are involved.

Additional social impact studies are planned for the coming years. Aside from those which have an agro-economic focus, but from which social dynamics can be inferred, such as price and marketing surveys, rural enterprise surveys, natural resource and land use planning surveys, and crop forecasting surveys, there are those which focus more specifically on the behavior of individuals: farm management surveys, rural employment surveys, and continued household budget and consumption surveys. In each instance the principle which guides the program is identical: data analysis informs policy, the impact of policy is monitored, data analysis re-informs policy and policy is adjusted accordingly. Analyses of the relationships between farm level phenomena, such as production constraints and inter/intra-household dynamics, on the one hand, and agricultural policy on the other, will be statements of, among other things, social impact. Thus, for example, an export policy which results in increased revenue from the sale of coffee can be assessed in terms of the expenditures and purchases of the members of the household to determine the distribution and use of the additional revenue by comparison to earlier periods (or other regions, other exports, level of education of head of household, female-headed households, etc.). The affects of policy and agricultural practice upon behavioral patterns can be assessed accordingly to enable ASPAP to identify beneficiary incidence and, equally, to program interventions.

It is particularly important in this regard to disaggregate data by gender in order to determine the differential impact of policy reform upon the members of the household. It has been convincingly demonstrated throughout the developing world that when the household itself is the minimal unit of socio-economic analysis the ways in which economic development effects differentially the members of the household are disguised. Rwandan women, already performing over 70% of the agricultural labor in addition to their other domestic activities, will be taxed differently from men by the labor requirements of new production systems. Similarly they will profit from price incentives for major export crops differently than will men. In order not to conclude a priori that whatever is good for the farmer is good for the farm family, data collection and analysis must recognize up-front the need to study the role of intra-household dynamics in the development process. ASPAP particularly has the capability to do this. By identifying the nature of this type of impact, the influence of policy upon agricultural activity and vice versa can be illustrated and those ways in which the members of the household are differentially affected can be convincingly brought to light.

7. RECOMMENDATIONS

Because so much of the social soundness of this project will evolve during the course of its activity, monitoring impact assumes a critical role in ascertaining beneficiary incidence and feasibility. The following recommendations will allow OAR/R and the GOR to maintain an awareness of the

current status of the social soundness of project interventions and to adjust them if need be in order to guard the overall social soundness of project activities.

1. A social scientist who can determine the macro-economic implications of micro-level behavior should be one of the long term technical advisors to SESA.
2. Information on the distribution and use of income among members of the household should be collected periodically to monitor the impact of pricing and other agro-economic policies and technological interventions upon the socio-economic status of family members.
3. More generally, SESA should establish a means of measuring the impact of policy on agricultural production.
4. Data and analyses should be disaggregated by gender in order to assess the differential impact of policy reform upon members of the farm household. This process should specify how land tenure currently affects differentially men and women, and how this process can be expected to change in the future with increased fragmentation of holdings.
5. Changes in agricultural production, level of income, magnitude of commercial transaction and other agro-economic variables should be measured against changes in socio-economic variables such as level of education among family members, employment, and marital status to reveal aspects of the social dynamics of rural development.
6. Integrated data sets should be compiled from the studies done by SESA, MINIPLAN, MINFINECO, and ONAPO in order to permit the cross-tabulation of economic and social practices.
7. The identification of participants for long term training should be a discussion point with the ministries participating in the project during design and negotiation in order to get as strong a commitment as possible from them to provide individuals for training. A Condition Precedent in the Project Agreement should specify that the disbursement of funds will be conditional upon the nomination of qualified candidates for training.
8. On-the-job and short-term training should be strongly supported as cost effective and realistic.
9. SESA should consider additional training for enumerators to increase their commitment to the project, dismiss poorly motivated enumerators, and reconsider the transport arrangements for the pilot phase of the national survey.

10. Survey and study results should be reported quickly and impressively in publications and seminars. SESA in particular should consider hiring an editor to facilitate the preparation and publication of reports. Each major research or publishing event should be followed by a seminar or other information dissemination mechanism in order to increase policy makers' awareness of the availability of the data and its implications for policy analysis, and to promote policy-makers' feedback to researchers.

ANNEX E.4 ECONOMIC ANALYSIS

Since this is an institution-building project, a cost-benefit analysis is neither appropriate nor possible. Of primary concern is the effectiveness of planned project activities in achieving the desired objectives and then, among project alternatives that are deemed effective, how to keep the total cost as low as possible.

Cost-effectiveness considerations have, in fact, dominated the planning of this follow-on project. In view of the large potential benefits to the entire Rwanda economy if the project is successful, and of the likely high costs in terms of misallocated investments and foregone economic growth if it fails, the foremost concern has been to choose the combination of support activities that will most effectively and quickly achieve the project purpose of improving agricultural policy formulation and planning on a sustained basis. While the choices often involve simply the art-of-the-possible within the present Rwandan context, the proposed combination of 1) technical assistance, short-term training, and materials to provide immediate support to the generation and analysis of relevant data for present policymaking purposes and 2) long-term training and other institution-building activities to enable Rwanda to sustain the process into the future is the best that could be designed, building on the experience of the predecessor Agricultural Survey and Analysis Project, to achieve both the short- and the longer-term objectives.

Even though the effectiveness of the effort is of primary interest, cost considerations have been a major concern. Less expensive and more cost-effective in-country training courses and seminars are preferred over training abroad wherever possible. While improving the capacity of Rwandan survey technicians and analysts to do the job is desired primarily to enhance the effectiveness of the effort, it will also be less costly in the longer run by reducing the need for foreign technical assistance.

The ASPA Project itself will finance pilot efforts to test the less expensive area-frame sampling methodology alongside the present sample-frame method to determine its relative cost-effectiveness for future survey work. Also, it will test new agricultural data collection methods against ones used in the first phase of the project to determine if cost savings are possible. Furthermore, because both trained human and financial resources are extremely limited, the Mission has reduced the long-term technical assistance component of the project to the minimum necessary to accomplish the objectives. The Mission has also budgeted substantial resources for short-term technical assistance, which will be further specified as implementation progresses. This approach maximizes the project's flexibility in responding to the needs of GOR policy makers.

Further, the project will obtain expert advice for the GOR on how to limit the number of larger surveys and costly census activities to the minimum required to establish necessary baseline data, and how to make effective use of smaller, focussed surveys and traditional data collection activities to provide periodic updates. In view of these efforts to assure effective

implementation of the project while keeping costs as low as possible, the Mission believes the proposed design is the most cost-effective approach possible.

With respect to the recurrent cost burden on the GOR of the data generation and analytical activities supported by the project, a user fee system will be instituted to spread some of the associated costs among the different agencies using them. GOR agencies involved in the project will charge for publications (a large element of project local costs) beyond those given gratis to policy makers. There is no question, however, that the GOR will have to provide an increasing amount of budgetary resources for salaries and logistical support of the agencies involved, particularly as the project comes to an end. By that time, the value to the government of the activities involved is expected to be so apparent that the relatively small amounts of additional budgetary support required to sustain the activities into the future should be considered high priority and well worth the cost.

The beneficiaries of the project, if it is successful in achieving its purpose, will ultimately include the entire Rwandan population, who will participate in a more rapidly growing economy resulting from more effective investment decisions and more efficient resource allocations, which will generate more productive employment and income and earn or save more foreign exchange for necessary imports. Since the project can only inform policy makers but not guarantee policy reform, project benefits accruing to Rwanda's rural population will be indirect. Further, since the impact of policy reform is often not immediate, many of these benefits are likely to occur after the project is complete. Nonetheless, if the project is not successful and if economic policy decisions are dominated by short-term political considerations uninformed by competent and timely analysis, based on reliable data, as to their actual economic effects and the trade-offs involved, the rates of economic growth and employment generation will be depressed below potential, and the entire population will suffer reduced income and welfare, especially as it continues to grow apace on the limited land area available.

To support a better informed policy-making process, basic economic research on the food and agricultural system needs to focus simultaneously on three levels: 1) microeconomic, 2) macroeconomic, and 3) micro-macro linkages. Micro-level analysis is needed on: a) farm economics of agricultural and livestock production, alternative crop mixes, input use, new technology and food security strategies; b) the economics of non-farm and off-farm rural employment and enterprises, including new inputs and technology; c) the economics of agricultural marketing and processing firms, including alternative inputs, outputs, distribution systems and technology; and d) consumer economics of nutrition, effective demand and employment, partly to orient marketing and production research.

At the macro-level continuous work is need to consider the effects of: a) the foreign exchange rate policy on food consumption and agricultural production, inputs and outputs, cash vs. subsistence crops; b) wage rate policy on rural and urban labor markets and employment opportunities; c) national price policies on individual and aggregate production and consumption; d) national investment and interest rate policies on agricultural investment; e) inflation on incentives to invest; f) food aid (as in disaster

relief) on domestic production incentives; and g) education and training policies and programs on the supply of trained people needed for rural development.

With respect to micro-macroeconomic linkages, policymakers need a better understanding of: a) price policy linkages between inputs and outputs and alternative crop mixes; b) technological research priorities among different crops; c) alternative roles of public sector agricultural research, the economics of incentives to seek improved technology and how to disseminate it among private sector enterprises; d) market price stabilization programs, the economics of stabilization and its effects on farm income; e) institutional alternatives in the market system, the economics of alternative means to stimulate investment in needed market services; and f) the possibilities of longer-term regional specialization and of interregional trade within Rwanda and between Rwanda and its neighboring countries.

An exemplary list of key areas of policy concern, to be targetted for analysis by the project, follows this Economic Analysis. Of priority interest are agricultural pricing policy issues, including the domestic price effects of the fixed exchange rate, since pricing policy decisions are so frequently affected by short-term political considerations without an adequate understanding of their longer-term economic consequences. When domestic price relationships fail to reflect actual economic values derived from market forces of supply and demand, producers direct their investments toward a less socially desirable mix of commodities and employ a less sustainable mix of inputs and, over time, this collective misallocation of scarce productive resources can quickly accumulate to massive proportions and result in a significantly lower rate of economic growth.

Recurrent Cost Analysis

The following table, based on budget figures given in Section 3 and Annex F, presents recurrent costs for each of the three participating ministries. For each ministry, total recurrent costs include personnel costs and local costs (operating expenses such as fuel and maintenance) to be devoted to the project. Also, since most of the personnel to be devoted to the project are already on ministry rolls, total recurrent costs are recalculated to include, besides local costs, only new personnel to be brought on board for the project. This latter total is a better indicator of the increased financial burden that the project will impose on the GOR.

The calculations suggest that the recurrent cost burden of the project on the GOR will be lowest in the first year of the project. Counting all personnel to be devoted to the project, even those already on board, the project will add about 7% to the appropriate part of the MINAGRI budget (SESA's budget is included within the Secretariat Generale's), 14% to the appropriate part of the MINIPLAN budget (Direction Generale of Statistics), and 27% to MINIFINECO's (Direction Generale of Economic Policy). Excluding personnel already on board, the added recurrent cost burden is lower -- about 1% for MINAGRI, 2% for MINIPLAN, and 20% for MINIFINECO.

Since MINAGRI and MINIPLAN are to assume increasing responsibility for paying local costs over the life of the project, the recurrent cost burden of the project on the GOR will be higher by the last year of the project. At that time the added recurrent cost burden on the GOR, excluding personnel on board before project start-up, is estimated to be about 9% for MINAGRI, 16% for MINIPLAN, and 20% for MINIFINECO.

These calculations suggest that early in the project, the added recurrent costs will not require the ministries to make tough decisions between priorities. The much higher figure for MINIFINECO is not especially worrisome since it is primarily this ministry which controls the budget purse strings for the GOR, as suggested by its willingness to assume a high percentage of local costs throughout the project.

As the project progresses, though, it will place an increasing financial strain on the ministries, and providing contributions for the project will become more difficult, especially for MINAGRI and MINIPLAN. This burden can be reduced somewhat by the agencies selling publications and providing consulting services. Hopefully this burden can also be reduced by careful planning and administration of survey activities, which will be an objective of the technical assistance and the annual work planning exercise.

RECURRENT COSTS
(\$thousands)

	1987	1988	1989	1990	1991
MINAGRI					
1. Personnel - total (new)	141 (15)	141 (15)	141 (15)	141 (15)	141 (15)
2. Local Costs	0	39	79	118	158
3. Total	141	180	220	259	299
as % of 1986 MINAGRI budget	1.2%	1.5%	1.9%	2.2%	2.5%
as % of 1986 Sec. Gen. budget	7.2%	9.1%	11.2%	13.2%	15.2%
4. Total (New Pers. + L. Costs)	15	54	94	133	173
as % of 1986 MINAGRI budget	.1%	.4%	.8%	1.1%	1.5%
as % of 1986 Sec. Gen. budget	.7%	2.7%	4.8%	6.8%	8.8%
MINIPLAN					
1. Personnel - total - (new)	75 (8)	75 (8)	75 (8)	75 (8)	75 (8)
2. Local Costs	0	20	39	59	78
3. Total	75	95	114	134	153
as % of 1986 MINIPLAN budget	5.1%	6.5%	7.8%	9.2%	10.5%
as % of 1986 D.G. Stat. budget	14.3%	18.2%	21.8%	25.6%	29.3%
4. Total (New Pers. + L. Costs)	8	28	47	67	86
as % of 1986 MINIPLAN budget	.5%	1.9%	3.2%	4.6%	5.9%
as % of 1986 D.G. Stat. budget	1.5%	5.3%	9.0%	12.8%	16.4%
MINIFINECO					
1. Personnel - total (new)	37 (8)	37 (8)	37 (8)	37 (8)	37 (8)
2. Local Costs	66	66	66	66	66
3. Total	103	103	103	103	103
as % of 1986 MINIFINECO budget	.2%	.2%	.2%	.2%	.2%
as % of 1986 D.G. Econ. budget	27.4%	27.4%	27.4%	27.4%	27.4%
4. Total (New Pers. + L. Costs)	74	74	74	74	74
as % of 1986 MINIFINECO budget	.1%	.1%	.1%	.1%	.1%
as % of 1986 D.G. Econ. budget	19.7%	19.7%	19.7%	19.7%	19.7%

ILLUSTRATIVE LIST OF POLICY AREAS OF CONCERN

As the Agricultural Surveys and Policy Analysis Project progresses, it is expected that an increasing demand for policy-oriented studies will come from GOR policy makers, at the highest level from the Interministerial Coordination Committees, and also from the project's Technical Group. A key feature of ASPAP is its flexibility in responding to policy makers' evolving demands for policy analysis, and the project will accord highest priority to carrying out studies identified by them.

The key areas of Rwandan agricultural policy most likely needing continued attention and possible reform over the next five years, and the reasons therefore, include those on the list below. This list is only illustrative; all topics for study must be approved within the context of participating agencies' work plans, and GOR policy makers are free to identify topics that are not included on this list.

1. Pricing policy

Better understanding of the economic effects of pricing policy decisions on production, export, import, and use or consumption of various agricultural crops and inputs, including the effects of foreign exchange rate policies, is of great importance to achieve more rapid, sustained agricultural development.

2. Marketing policy

The effects of public sector marketing activities on production and consumption and how to improve the efficiency of the entire agricultural marketing system bear sustained analysis.

3. Small farm production systems, water management, land use and related problems

In order to assist the small-scale farmer increase production, MINIAGRI must continue to study small farm production systems, land tenure and other land use issues, and the various constraints they face, so that remedial measures may be properly designed. The potential for increasing production by enhancing water management, such as through alternative irrigation systems, marsh drainage, water storage and stock watering, needs to be subjected to technical, social and economic feasibility analyses.

4. Rural non-farm small-scale enterprises, constraints they face and opportunities for promotion

Not only are non-farm rural activities important complements to farm production itself, providing inputs and processing outputs, but they also constitute important sources of household employment and income for low-income farm families.

5. Private sector agribusiness climate and official

Like rural non-farm small-scale enterprises, the larger-scale urban agribusiness activities complement agricultural production and provide important sources of employment and income. There is a need to investigate the effects of various national and local legal and regulatory constraints, taxation and investment incentive policies, on the small-scale enterprise sector.

6. Agricultural credit

The provision of timely and sufficient credit to farmers and to off-farm processing, storage, transportation and other marketing activities is important to facilitate efficient marketing of the various agricultural crops produced for export or domestic trade.

7. Fertilizer marketing and use

In conjunction with technical research on how much and what types of fertilizer should be used for different crops in different regions of the country for optimum results, effective and efficient fertilizer marketing arrangements need to be facilitated without incurring burdensome public subsidies.

8. Decentralized agricultural development programs and local participation, especially the cooperative movement

Successful rural development requires increasing participation by local leaders and the people being developed. To achieve this GOR goal more work is required to devise more effective techniques for involving local people in the decision-making and implementation processes of centrally-funded development programs, in local revenue generation and expenditure control, and in designing and implementing local self-help activities, particularly those involving land and water development, forestry and environmental conservation. The achievements of the Rwandan Umuganda Program need to be analyzed and monitored.

9. Land tenure situation and its impact on agricultural production incentives

There is growing recognition that land tenure arrangements have an important effect on the farmer's incentives to conserve the fertility of his or her land and to invest in long-term improvements. They can also determine what use the farmer or the community will make of different parcels of land.

10. Cross-border trade in agricultural commodities, and the need for official control or encouragement

The nature, magnitude and economic effects of official and unofficial cross-border trade should be monitored so policymakers can better understand its benefits and how to facilitate it.

11. Effectiveness of agricultural services and supporting infrastructure

The need for reliable studies in this area of concern should be self evident, to enable MINIAGRI to design more effective development programs. In addition to the need for more effective agricultural research and extension services, areas of immediate concern include: a) the transportation and storage of agricultural commodities; b) how to achieve more efficient storage on farms and at local, provincial and national levels; and c) the appropriate role of cooperatives in providing agricultural services, especially input and output marketing, storage and credit, and what impediments exist to fulfilling these roles, including the economic viability of various activities as well as organizational and management problems.

12. Budgetary resource allocation in support of agriculture

The most effective level and use of budgetary resources allocated to MINIAGRI by the GOR, and those received from foreign donors, is a matter of concern, as is the justification of sufficient allocations to do the job.

13. Overall agricultural development strategy, program priorities, and criteria for project selection and project design

The institutional capacity to devise a rational and coherent development strategy and achieve an efficient use of scarce investment resources in its implementation is of great importance when resources are limited. This will require careful monitoring of the domestic resource costs and international comparative advantages of different crop, subsector and production alternatives (e.g., livestock vs. crop production, export crops vs. domestic food crops and those that will substitute for imports, different mixes of food crops, etc.).

14. Effects of macroeconomic trends and policies on agricultural development

MINIAGRI must not accept the macroeconomic environment as a given and leave such things as the foreign exchange rate, the structure and level of tariffs and other trade restrictions, the interest rate structure, minimum wage rates and domestic tax levels uncritically within the purview of other ministries. It must make sure the other members of cabinet understand the implications of macroeconomic trends and policies on the ultimate success and efficiency of the agricultural development effort. MINIPLAN and MINIFINECO must also improve their own institutional capacity to analyze and understand better the effects and trade-offs of such macro-level policies that are under their control or influence.

15. Relative emphasis of agricultural development programs in the overall economic development plan

If agricultural development is to be provided adequate support as the primary productive sector in Rwanda, well-informed choices must be made to support various agricultural services and other development activities with sufficient resources to have the desired positive economic impact, without overdoing it to the point of waste.

16. Impact of policy reforms on various social groups and ways to avoid serious political conflict

The success of the economic development program, and of the policy reforms designed to support it, will ultimately depend on its political acceptance by important and articulate groups within the society, or at least their acquiescence, until the expected positive benefits begin to accrue. Therefore, the ability of the GOR to identify and alleviate, on a timely basis, potential sources of protest or destabilizing conflict is of the utmost importance to the success of the whole effort.

17. Foreign donor coordination, program priorities and criteria for project selection and design

The only effective way to rationalize and coordinate the multiplicity of foreign donor-supported activities in a country like Rwanda is ultimately for the host-country itself to do it. MINIAGRI, MINIPLAN, and MINIFINECO must develop the capacity to establish a coherent development strategy, with a clear sense of priorities, and to impose that rationale on the selection and design of foreign donor-funded projects.

18. Intra- and inter-institutional coordination of GOR institutions involved in rural development

How to achieve closer and more effective communication and coordination among the various GOR rural development agencies themselves warrants expert attention.

19. Procedures and incentive structure for the selection, retention, and career development of professionals in government institutions serving agriculture and making agricultural policy

The GOR attempt to improve its institutional capacity to manage the agricultural sector, the particular effort supported by this project, can easily founder if the government agencies involved are unable to attract, develop and retain the professional personnel required. MINIAGRI, MINIPLAN and MINIFINECO, with technical support from this project, should take a hard look at the problem and determine what they can do by themselves to improve the situation and what reforms or improvements they should recommend for government-wide adoption.

20. Other organization and management issues within MINIAGRI and other key institutions engaged in policy formulation for the agricultural sector

As identified by members of the ICCs and other ministry decision makers.

An attempt to put this list in priority order at this time would be purely artificial. This will be the task of the Project Technical Group and ministry decision makers as they sort out annual workplans. In this regard, the Mission believes that the development of the institutional capacity to perform

these tasks on a continuing basis must take precedence over the prior identification of specific studies to be undertaken. Likely candidates for early attention under the ASPA Project are:

- 1) Pricing policy
- 2) Marketing policy
- 3) Small farm production systems, water management, land use
- 4) Cross-border trade in agricultural commodities

ANNEX E.5

ENGINEERING ANALYSIS & 611 (A) CERTIFICATION

1. Rationale

An expansion of the SESA office building is necessary to accommodate an increase in professional staff planned under the project. This increase will provide office space for the four technical advisors and their counterparts. A multiple purpose room will be created to provide adequate space for questionnaire review and coding, staff meetings, and training. At present these activities are carried out in the existing room intended for computer hardware and storage that is shared with the Direction Generale of Forests.

2. Description of Building

To accommodate the growth of SESA and in order to respond to its physical needs, the following additional facilities will be built:

- a) Four (4) offices of approximately sixteen (16) square meters each, for a total of sixty four (64) square meters;
- b) One (1) multiple purpose room of approximately fifty (50) square meters;
- c) One toilet room of approximately sixteen (16) square meters;
- d) Renovation of thirty (30) square meters in the existing computer room and storage area; and
- e) Corridors will occupy an area of approximately twenty four (24) square meters

Total area to be built and renovated is approximately two hundred seventeen (217) square meters. Reference is made to the attached floor plan for details.

3. Location and Siting of Building

The new building complex will be an extension of the existing building of SESA. Access will be from the main road fronting the existing offices. Sufficient space is left for parking, and utilities such as electrical and water services are available in the capital city of Kigali.

4. Construction Plans and Specifications

The preparation of construction drawings and construction documents will be prepared by the engineering and architecture office of the Ministry of Agriculture, Livestock and Forests (MINAGRI) of the Rwanda Government. These drawings will incorporate, as recommended by REDSO/Eng. in Nairobi 011715, dated 03/25/86, the minimum seismic considerations thus insuring the building's resistivity to seismic forces. The building will have reinforced grade beams tying footings together, reinforced columns, and reinforced ring beams. MINAGRI has the installed capacity to undertake this task as proven to USAID over the

previous projects funded by OAR/Rwanda. AID through the OAR in Kigali and with REDSO engineering assistance will approve all plans, specifications, tender documents, and cost estimates prepared by MINAGRI.

5. Construction Methodology

GOR and AID host country contracting procedures will be used to advertise, evaluate and award a contract to build the above-mentioned facility. Because of its simplicity and size, this building expansion will be readily built by using the capabilities of local contractors. OAR/Rwanda and the GOR, including MINAGRI, have had considerable experience with host country contracting for AID project construction, and OAR has found this experience to be favorable.

6. Construction Supervision

During the short construction period, approximately six (6) months, MINAGRI and AID will jointly supervise the contractor's operation to insure compliance with plans and specifications.

7. Disbursement Scheme

MINAGRI will prepare, based upon the supervisory work mentioned above, the progress payments due to the contractor. AID will approve the payment requests and pay directly to the contractor on behalf of the GOR. REDSO/RPMC will work out the details to insure timely disbursements against contractor's performance.

8. Construction Estimate

The engineering and supervision of this expansion will be carried out by MINAGRI at no cost to the project. The current construction cost per square meter in Kigali is approximately RWF 35,000 to 40,000 per square meter. The approximate cost of this building expansion is broken down as follows:

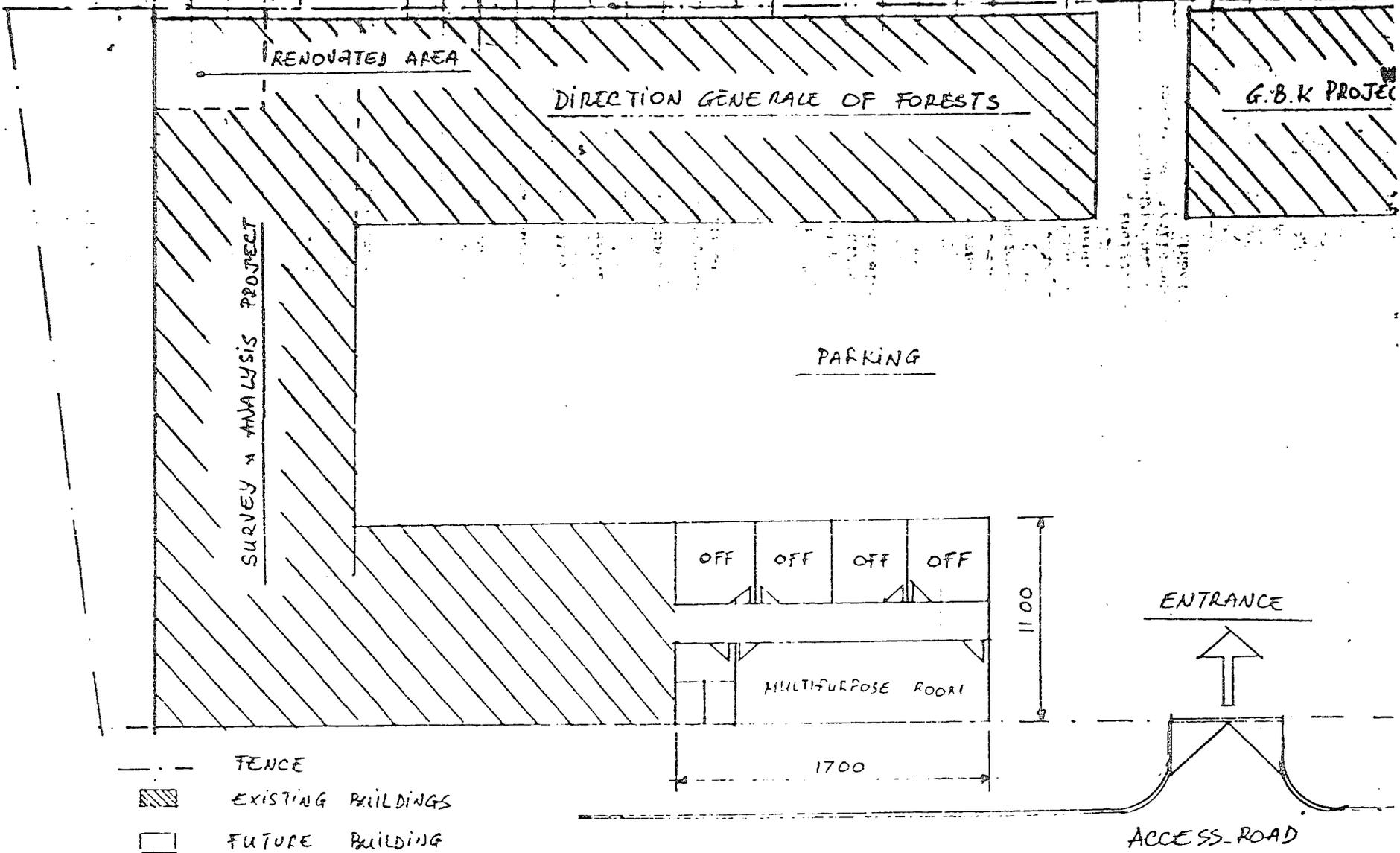
New construction, 187 sq.mts at RWF 35,000 per sq.mt.	RWF 6,545,000	
Renovation, 30 sq.mts at RWF 15,000 per sq.mt.	450,000	
Two air conditioning units for renovated area, at RWF 80,000 each	160,000	
Subtotal	7,155,000	
Inflation, at 5%	358,000	
Contingencies, at 5%	358,000	
Grand Total	RWF 7,871,000	
	at RWF 85 to U.S. \$1	\$92,600
	rounded	\$95,000

9. AID Monitoring

Because of the excellent installed capacity of the PSC engineer in OAR/Rwanda, AID monitoring will be carried out smoothly, effectively and in the best interest of the U.S. Government. Additionally, REDSO engineering assistance will be provided on a regular basis to OAR/Rwanda.

10. 611(A) Determination

Sufficient experience has been gained by the GOR in the preparation of construction drawings, overall planning, cost estimating and construction supervision. OAR/R is confident that this experience is conclusive enough to determine that all conditions of Section 611 (A) of the FAA have been met by this project activity.

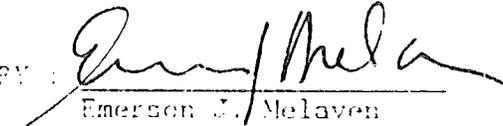


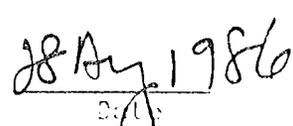
ANNEX E.6
INITIAL ENVIRONMENTAL EXAMINATION

PROJECT COUNTRY : Rwanda
PROJECT TITLE AND NUMBER : Agricultural Surveys and
Policy Analysis 696-0126
FUNDING : \$7,000,000 FY 1986-81
IEE PREPARED BY : John J. Gaudet, Regional
Environmental Officer
ENVIRONMENTAL ACTION RECOMMENDED : Negative Determination

JUSTIFICATION: The Project will consist mainly of special studies and larger or periodic studies with no effect on the natural or physical environment. These Project activities would, therefore, fall within the Reg 16 criteria for Categorical Exclusions (216.2(C)) I (I and III). However, there will be a certain amount of construction involved in the expansion of office space, but this will be carried out by extending an existing building on an existing site. Therefore, no significant environmental impacts are expected and a negative determination is requested.

ACTION REQUESTED BY :


Emerson J. Melaven


Date

CONCURRENCE:

State 301524
Bureau Environmental Officer

Aug. 28, 1986
Date

Clearance: IC AFP

State 301524

Aug. 28, 1986
Date

BEST AVAILABLE

ANNEX F

DETAILED BUDGETS

AID CONTRIBUTION (4 thousands)

	YF 1	YR 2	YR 3	YF 4	YF 5	TOTAL
1. TECHNICAL ASSISTANCE						
A. Long Term						
MINAGRI-ag economist		130	130	130	130	520
data processor			130	130		260
survey/statist.			130	130		260
social scientist			130	130		260
MINIPLAN-economist		130	130	130		390
MINIFINECO-economist		130	130	130		390
Total		390	780	780	130	2080
B. Short Term						
MINAGRI (4 pm/yr)		64	64	64	64	256
MINIPLAN (3 pm/yr)		48	48	48	48	192
MINIFINECO (3 pm/yr)		48	48	48	48	192
Total		160	160	160	160	640
TOTAL TECH. ASSISTANCE		550	940	940	290	2720
2. EVAL. & OAR MGT.						
Evaluation/Audit					48	48
OAR Project Manager	20	20	20	20	20	100
Total	20	68	20	20	68	196
3. COMMODITIES & HOUSING						
A. MINAGRI - computers						
vehicles	72	51	72			144
survey equipment		70				70
aerial photogr.		250				250
TA housing		25	100	25	25	175
TA furn./appl.	76					76
Other	30					30
Total	178	396	172	25	25	796
B. MINIPLAN - computers						
vehicles	56	62				118
TA housing		25	25	25		75
TA furn./appl.	29					29
Other	15					15
Total	100	87	25	25		237

BEST AVAILABLE

G. MINIFINECO - comput.		33				33
vehicles	32					32
14 housing		25	25	25		75
14 furn./appl.	24					24
Other	19					19
Total	76	58	25	25		174
TOTAL COMMOD. & HOUSING	354	541	222	75	28	1217
4. CONSTRUCTION	90					90
5. TRAINING						
A. Int'l Long-Term						
MINAGRI-ag econ (2)	52	52				104
survey/stat.	26	26				52
computer spec.	26	26				52
MINIPLAN-statistician	26	26				52
economist	26	26				52
MINIFINECO-economist	26	26				52
statistician	26	26				52
Total	208	208				416
B. Int'l Short-Term						
MINAGRI		17	17	17	17	68
MINIPLAN	17	17	17	17	17	85
MINIFINECO		27	27	27	27	108
Total	17	61	61	61	61	251
C. In-country						
MINAGRI		16	16	16	16	64
MINIPLAN		16	16	16	16	64
MINIFINECO		16	16	16	16	64
Total		48	48	48	48	192
TOTAL TRAINING	225	317	109	109	109	869
6. LOCAL COSTS						
MINAGRI	99	158	118	79	39	493
MINIPLAN		78	59	39	20	196
MINIFINECO		11	11	11	11	44
TOTAL LOCAL COSTS	99	247	188	129	70	733
TOTAL 1-6	788	1723	1479	1273	562	5825
Inflation (5% cpd)	39	177	234	275	155	881
Contingency (5%)	39	86	74	64	28	291
GRAND TOTAL	867	1987	1767	1612	745	6997

GOR CONTRIBUTION \$thousands equivalent

	YR 1	YR 2	YR 3	YR 4	YR 5	TOTAL
1. PERSONNEL						
A. MINAGRI Salaries						
Professional	12	23	23	23	23	104
Field Staff	56	110	110	110	110	496
Other	4	8	8	8	8	36
Total	72	141	141	141	141	636
B. MINIPLAN Salaries						
Professional		16	16	16	16	64
Field Staff		46	46	46	46	184
Other		13	13	13	13	52
Total	0	75	75	75	75	300
D. MINIFINECO Salaries						
Professional		8	8	8	8	32
Field staff		25	25	25	25	100
Other		4	4	4	4	16
Total	0	37	37	37	37	148
TOTAL SALARIES	72	253	253	253	253	1084
2. LOCAL COSTS						
A. Office space						
MINAGRI	6	12	12	12	12	54
MINIPLAN		9	9	9	9	36
MINIFINECO		6	6	6	6	24
Total	6	27	27	27	27	114
B. Other local costs						
MINAGRI		39	79	118	158	394
MINIPLAN		20	39	59	78	196
MINIFINECO		66	66	66	66	264
Total	0	125	184	243	302	854
TOTAL LOCAL COSTS	6	152	211	270	329	968
TOTAL 1 + 2	78	405	464	523	582	2052
Inflation (10% cpd)	8	85	153	241	355	842
Contingency (10%)	8	41	46	52	58	205
GRAND TOTAL	94	531	664	816	995	3099

BEST AVAILABLE

120

LONG TERM TECHNICAL ASSISTANCE COSTS
(3 year assignment)

1. Salary + Allowances

Salary \$50,000/yr	\$ 150,000
differential 25%	37,500
FICA (7%)	13,125
COLA	6,000
Education Allowance	42,000
Insurance, DBA	1,500
	<u>250,125</u>

2. Travel + Transportation

Round trip ticket x 3 persons	9,000
2 R + R x 3 persons	18,000
Transport of HHE, POV	15,000
Per diem 24 days x \$125/day	3,000
	<u>45,000</u>

3. Other Direct Costs

Communications	2,500
Visas, vaccinations, physicals	500
Miscellaneous	1,500
	<u>4,500</u>

Total 1-3	299,625
Overhead 30% of 1-3	89,888
Grand Total	<u>389,513</u>

Cost/yr	<u>\$129,838</u>
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HOUSING AND COMMODITIES COSTS FOR
LONG TERM TECHNICAL ASSISTANCE

Housing (per year)

Rent	\$ 12,000
Utilities	4,000
Maintenance	1,000
Guards	5,000
Project support*	3,000
	<u>\$25,000</u>

*covers OAR costs for supporting project (e.g. accounting services, customs clearance of commodities); to be earmarked with PIO/T

Household Furniture, Appliances (including shipping)

Furniture set	\$20,000
Appliance set*	9,000
	<u>\$29,000</u>

*includes security radio

SHORT TERM TECHNICAL ASSISTANCE COSTS
(one month)

1.	<u>Salary</u>	
	Salary	\$200/day x 26
	FICA	
		\$5,200
		364
		<u>\$5,564</u>
2.	<u>Travel</u>	
	Round trip ticket	\$3,000
	2 days per diem x \$125	250
	28 days per diem x \$96	2,688
		<u>5,938</u>
3.	<u>Miscellaneous</u> (visas, communics, etc.)	500
	Total 1-3	12,002
	Overhead 30% of 1-3	3,601
	Grand Total	<u>\$15,603</u>

TRAINING COSTS

In United States (including travel)

1 month course	\$ 6,500
2 month course	10,500
1 yr Master's degree	25,100
2 yr Master's degree	51,500

At English Training Center (USIS, Kigali)

6 month course (720 hours) \$2,118
(assumes 5 students per class)

GOR ANNUAL LOCAL COSTS
(\$1,000 equivalent of Rwanda Francs)

	<u>MINAGRI</u>	<u>MINIFLAN</u>	<u>MINIFINECO</u>
Personnel*	48	15	15
Office supplies, utilities	23	8	6
Vehicle maintenance, fuel, insurance	18	10	10
Computer maintenance	6	6	6
Publications, printing	70	47	15
Local travel	33	12	25
Total	197	98	77

* Includes in-country training, salary supplements; personnel official salaries paid entirely by GOR and are not shown in this table.

GOR CONTRIBUTION TO LOCAL COSTS (%)*

	<u>Yr 1</u>	<u>Yr 2</u>	<u>Yr 3</u>	<u>Yr 4</u>	<u>Yr 5</u>
MINAGRI	0	20	40	60	80
MINIFLAN	-	20	40	60	80
MINIFINECO	-	86	86	86	86

* Excludes official salaries -- paid 100% by GOR

ANNEX G

ILLUSTRATIVE COMMODITIES LIST
(US \$)

<u>Computers*</u>		<u>Qty.</u>	<u>Cost</u>	<u>Total</u>
MINAGRI	IBM XT or equivalent	2	8,600	17,200
	IBM PC or equivalent	3	8,100	24,300
	Software packages	5	1,000	5,000
	Diskettes, paper, etc			4,000
				<u>50,500</u>
MINIPLAN	IBM XT or equivalent	5	8,600	43,000
	IBM AT or equivalent	1	11,100	11,100
	Software packages	6	1,000	6,000
	Diskettes, paper, etc.			2,000
				<u>62,100</u>
MINIFINECO	IBM XT or equivalent	2	8,600	17,200
	IBM AT or equivalent	1	11,100	11,100
	Software packages	3	1,000	3,000
	Diskettes, paper, etc			2,000
				<u>33,300</u>
Total Computers				145,900

*Cost estimates include transportation, insurance, and installation charges. Estimates also include related hardware, which includes the following equipment or its equivalent: Cuesta Data Saver standby power supply, Topas Micro UPS, LM1200 Waber spike supressor, cables, AT/370 option kits, AMDEK 310A monochrome monitor, Epson 105 printer. Examples of software include: PC/Focus Database Manager, Knowledgeman, SPSS/PC Plus, Microsoft programs and compilers.

125

<u>Vehicles</u>		<u>Qty.</u>	<u>Cost</u>	<u>Total</u>
MINAGRI	Passenger vehicles	6	12,000	72,000
	4 wheel drive	2	16,000	32,000
	Motorcycles (175 cc)	20	2,000	40,000
				<u>144,000</u>
MINIPLAN	Passenger vehicle	2	12,000	24,000
	4 wheel drive	2	16,000	32,000
				<u>56,000</u>
MINIFINECO	4-wheel drive	2	16,000	32,000
Spares				43,000
Total Vehicles & Spares				275,000

<u>Survey Equipment</u>		<u>Qty.</u>	<u>Cost</u>	<u>Total</u>
MINAGRI	sets*	20	3,500	70,000

*includes: optical bearing compasses, 30m fiberglass tapes with reels, calculators, book bags with straps, converter kits for calculators

<u>TA Furniture & Appliances*</u>		<u>Qty.</u>	<u>Cost</u>	<u>Total</u>
MINAGRI	furniture sets	2	20,000	40,000
	appliance sets	4	9,000	36,000
MINIPLAN	furniture sets	1	20,000	20,000
	appliance sets	1	9,000	9,000
MINIFINECO	furniture sets	1	20,000	20,000
	appliance sets	1	9,000	9,000
Total Furniture & Appliances				134,000

*appliances include security radios; only 2 sets of furniture for MINAGRI since 2 sets carried over from Phase 1 project (ASAP)

Office Equipment

	<u>No.</u>	<u>Cost</u>	<u>Total</u>
MINIPLAN photocopier	1	4,000	4,000

Aerial Photography

aerial photo enlargements 1:5000; contact prints made into photomosaics
\$250,000

ANNEX H

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR FOR AFRICA

From: Emerson J. Melaven, OAR/Rwanda

Subject: Rwanda Agricultural Surveys and Policy Analysis Project
(696-0126); Source/Origin Procurement Waiver for Vehicles

Problem: Your approval of a source/origin procurement waiver from AID Geographic Code 090 (US only) to code 935 (Special Free World) is required to permit the procurement for the subject project of 14 passenger vehicles and 20 motorcycles of code 935 source and origin.

- (a) Cooperating Country : Rwanda
- (b) Authorizing Document: Project Paper
- (c) Project : Agricultural Surveys and Policy Analysis Project (696-0126)
- (d) Nature of Funding : Grant
- (e) Description of Goods: 14 Four-wheel Drive or Sedan-type Vehicles and 20 lightweight Motorcycles (175cc), and related spare parts.
- (f) Approximate Value : \$275,000
- (g) Probable Origin : France, W. Germany, or Japan
- (h) Probable Source : France, W. Germany, Japan or Rwanda

Discussion:

It is anticipated that the Agricultural Surveys and Policy Analysis Project will be authorized in the amount of \$7,000,000 by the OAR/Rwanda and concurred in by REDSO/ESA, in August 1986. This project is designed to strengthen the capability and performance of the Government of Rwanda (GOR) in data collection, processing, and analysis in order to improve policy making for the rural economy. The project will assist the statistics and survey units of the Ministries of Agriculture (MINAGRI), Plan (MINIPLAN), and Finance and Economy (MINIFINECO) to undertake special studies and periodic surveys.

For MINAGRI, MINIPLAN, and MINIFINECO to effectively carry out their functions under the project, it is essential that 14 vehicles be made available to their survey units' staff, advisors, and consultants, and 20 motorcycles be provided to the field supervisors.

Rwanda, a former Belgian colony, has established predominant trade links with European countries. As a result, distributors and service centers for most types of vehicles in Rwanda are connected to European manufacturers. Except for Japanese distributors, there are no other readily accessible sources of vehicles, spare parts and maintenance and repair services in the country.

OAR/Rwanda experience indicates that private service centers in the country can only provide adequate service to non-U.S. Manufactured vehicles. All vehicles currently used by OAR/Rwanda were manufactured in either Europe or Japan and are, then, of AID Geographic Code 935 origin.

Given the extremely rugged road conditions in Rwanda and the heavy use the vehicles will receive, maintenance and repair will be required frequently. Since adequate mobility is required to keep the periodic surveys and special studies on schedule, vehicles which can be maintained and repaired by local private service centers are critical to the success of project objectives.

In accordance with Section 636 (i) of the Foreign Assistance Act (FAA), motor vehicles, to be eligible for AID financing, must be manufactured in the United States unless you determine that "special circumstances" exist, in which case the requirement for manufacture in the United States may be waived. Under AID Handbook 1, Supplement B, Chapter 402d(1), "circumstances which may merit waiving the requirement are (a) inability of U.S. manufacturers to provide a particular type of needed vehicle; e.g., light weight motorcycles, right-hand drive vehicles; (b) present or projected lack of adequate service facilities and supply of spare parts for U.S. manufactured vehicles;..."

In addition, the authorized source/origin procurement code for vehicles is 000 (U.S. only). Any change of the authorized code requires a waiver. Under AID Handbook 1, Supplement B, Chapter 584a(2), one of the criteria justifying a waiver is that "the commodity is not available from countries or areas included in the authorized geographic code." If procurement is to be from Code 935 source/origin, you must also certify that exclusion of procurement from 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.

Justification:

Motorcycles. Authorized representatives, servicing facilities and spare parts for motorcycles manufactured in the U.S. do not exist in Rwanda. Almost all of the motorcycles in Rwanda are manufactured in Japan and are backed with local dealer representation. Because U.S. manufacturers effectively do not provide the type of motorcycle required which can be maintained locally, special circumstances exist to justify a waiver of the requirements of Section 636 (i) of the FAA. In addition, because motorcycles which can be adequately maintained in Rwanda are effectively not available within the authorized Geographic Code there is adequate justification for a source/origin waiver under the criteria specified in AID Handbook 1, Supplement B, Chapter 584a (2) above.

Passenger Vehicles. As discussed above, private service centers in Rwanda do not provide adequate service to U.S.-manufactured vehicles, nor can they provide appropriate spare parts. Since one of the "special circumstances" justifying a waiver of the aforementioned section 636 (i) requirement is the present or projected lack of adequate service facilities and supply of spare parts for U.S.-manufactured vehicles,

there is ample justification for a waiver with regard to the 14 passenger vehicles to be procured under the project. In addition, because U.S.-manufactured vehicles which can be adequately serviced in Rwanda are unavailable, there is appropriate justification for a source/origin procurement waiver under the criteria specified in AID Handbook 1, Supplement B, Chapter 5B4a (2) above.

Recommendation:

For the above reasons it is recommended that you (1) approve this request for a source/origin procurement waiver in the amount of \$275,000 to permit the procurement of the above-described commodities from countries included in AID Geographic Code 935, (2) certify that "exclusion of procurement from Free World countries other than the cooperating country and countries included in Code 941 would seriously impede the attainment of U.S. foreign policy objectives and the objectives of the Foreign Assistance Program," and (3) determine that special circumstances exist to waive, and do hereby waive, the requirements of section 636 (i) of the Foreign Assistance Act, as amended, with regard to the above-described vehicles.

Approved: _____

Disapproved: _____

Date: _____

ANNEX I

TERMS OF REFERENCE

TEAM LEADER

A. Objective: As the senior policy analyst the consultant will assist the GOR in strengthening its policy analysis and formulation capability and assure that planning and policy making are based on better information on the rural economy. The consultant will work closely with Rwandan counterparts on the Project Technical Group (PTG) and with policy makers of the CIC for Rural Development (CIC/RD) and the CIC for Political Economy (CIC/PE). S/he will supervise the work of other team members as they will be brought on board (long and short term) and will serve as the principle contact between A.I.D. and the institution which s/he represents in Rwanda.

B. Scope of Work: To achieve this objective the team leader will undertake the following specific tasks:

--assist members of the CIC/RD in identifying the information, data and surveys needed for policy formulation and planning of the rural economy. To accomplish this, strategy guidelines for a multi-year program of data collection and policy analysis will be formulated by the CIC/RD.

--as a member of the PTG assist that group in the preparation of a multi-year work program for data collection and policy analysis consistent with the strategy guidelines as well as annual work plans for approval by the CIC/RD and A.I.D.

--assist in the development of job descriptions for expatriate and Rwandan staff assigned to the project to do work on specific studies, surveys and analytical tasks, as formulated in the multi-year information and data collection strategy and annual work plans. These job descriptions must be approved by the CIC/RD and A.I.D.

--advise the CIC/RD in undertaking the next population census.

--advise SESA staff in all aspects related to its data collection, processing and analysis functions.

--assist the Ministry of Plan and the Ministry of Finance and Economy in carrying through their responsibilities under this project.

--take on other duties as assigned by the AID Representative or his designee.

C. Qualifications: The candidate must have a Ph.d in an appropriate social science and have at least five years experience working overseas in a policy advisory function. S/he must have experience with handling and analysing large data sets and in the application of quantitative techniques.