

FINAL EVALUATION OF PROJECT 052
AND
A MID-TERM EVALUATION OF PROJECT 070

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EXECUTIVE SUMMARY

This report covers two project evaluations: one at the close of 052 and the other at the middle of 070. The evaluation coincides with the decennium of USAID's assistance to develop the capacity of the Department of Agriculture, Rural Development, and Environment (DADRE) to engage in analyses, evaluations, and planning for more appropriate strategies, improved management, and increased production in the agricultural sector. USAID has contributed two major sets of inputs: training for Zairian ministerial officials and technical assistance to the Service d'Etudes et Planification, to manage, coordinate and perform its tasks while its technical cadre were undergoing training in the U.S. The team would later assist the Service to utilize the trained personnel.

The accomplishments have been significant: the number of scholarships designated have and are being completed and, to date, some two-thirds have returned to GOZ service; the small DADRE unit designated the projects' counterpart organization has grown from a minor bureau with two divisions to a Service with four divisions and 133 personnel. The Service has begun to provide DADRE with the kinds of information required for national planning.

The continuing problem areas reviewed in this evaluation deal with: retention of U.S.-trained technicians, and the need for continuation, at a reduced level, of U.S. training; remaining inputs and actions required to help the Service achieve the functional model in the original project design; and the crucial problem of working from inaccurate national statistics. Compared to what has been achieved and expended, and assuming erosion of personnel can be halted, the future inputs required are modest in comparison to previous expenditure. In terms of the ultimate accomplishment of the projects' goals, these capstone efforts are vital; if they are not made, the projects will have provided skilled technicians in an area of critical need -- but they will not have resulted in the institutional planning and research dynamo the Service was projected to be.

ABBREVIATIONS

- DAC/OECD - Development Assistance Committee of the Organization for Economic Cooperation and Development
- DADRE - Department of Agriculture, Rural Development, and Environment
- DAS - Division of Agricultural Statistics
- DASP - Division of Agricultural Strategy and Planning
- ELT - English Language Training
- EOPS - End of Project Status
- FAO - Food and Agriculture Organization
- GOZ - Government of Zaire
- INS - Institut National de Statistiques
- ISPC - International Statistics Program Center, U.S. Bureau of the Census
- OICD - Office of International Cooperation and Development, U.S. Department of Agriculture
- ONDE - Office Nationale de Développement de l'Elevage
- SCAD - Systeme de Collecte et Analyse des Données, North Shaba Project
- SECID - Southeast Consortium for International Development
- SEP - Service d'Etudes et Planification
- SRS - Statistical Reporting Service of the U.S. Department of Agriculture
- TOEFL - Test of English as a Foreign Language
- UPS - Uninterrupted Power Supply
- USDA - United States Department of Agriculture

I. SUMMARY

The Agricultural Economic Development Project (052) and its successor, the Agriculture Sector Studies Project (070), followed Project 050 in an effort to provide long-term university and on-the-job training, for building an institution, the Service d'Etudes et Planification, and to develop its output capabilities. Two main USAID inputs were involved; a substantial post-graduate training program in U.S. institutions; and a technical assistance program in the Service d'Etudes et Planification.

Within the Service, the projects were designed in conformity with its two divisions -- recently expanded to four -- the Division of Agricultural Statistics (DAS) and the Division of Agricultural Strategy and Planning (DASP). Training for DAS started in 1975 under Project 050 to develop an area frame sample representative of the agriculture of the country. This has mostly been completed with considerable technical assistance. Of 22 students originally sent from DAS to the U.S. for graduate level training, five are now left in that division and one went to DASP and no longer appears in DAS totals (See Annex B, Table 3).

The DAS has been recently studied during a three-month TDY by George Frazier of Pragma and we are in general agreement with his findings.

We conclude, and the FAO Resident Representative, Mr. Salah Niare, agrees, that the DAS, in spite of having an adequate number of trained Zairians for its present needs, is currently: unable technically to conduct an agricultural census; unable to analyze the data collected rapidly enough for a census; and unable to administer the logistics and other problems involved in a census.

The DAS currently plans to start a census of the northern half of Zaire in May, 1983. It was scheduled previously for September, 1981, then 1982, but was postponed each time for lack of funds. If the DAS is to provide a valid basis of statistics for the DASP

and DADRE in general and to improve the data gathering system so as to avoid using the agronome du localit , a new system of computer analysis of data is required; a new system of logistical support and supervision of interviewers is needed; and several expatriate technicians will be required in Kinshasa and in the field.

The Division of Agricultural Strategy and Planning (DASP) of the Service has been the second of two major units of the Service included in these USAID funded projects; it contains three bureaus, The Bureau of Agro-Economic Analysis has started to complete the commodity sector studies on production and marketing called for under Project 052, The reports are lacking in depth and quality of analysis; this is partly due to a lack of valid statistical data. Retention of trained personnel has been a problem. The Bureau of Identification and Development of Projects, apart from a chronic problem of loss of trained staff, is engaged in project design and the evaluation of project papers. The GOZ now uses this bureau to participate in donor design teams and to evaluate projects from donors, The Bureau of Agricultural Planning, which is to carry out quantitative planning, is hindered by the lack of valid statistics on the agricultural sector. The bureau did assist in planning the "Plan de Relance Agricole, 1982-1984"; it is actively involved in the preparation of a five-year plan. The first regional plan is nearly completed, however, if plans for the nine regions have to be prepared and maintained up-to-date, further technical assistance will be needed. It is proposed to put trained Zairians from the bureau in the regions to assist in launching decentralized planning. The turnover of personnel from this division to other governmental positions has totaled eight to date of whom three have gone elsewhere in DOA and four have gone to the Ministry of Plan -- this bureau has been especially hit by the loss of these U.S. trained technicians.

Under Project 052, 33 Zairians have received training in the U.S. at the Master of Science level except for two Doctorates. Of these, only six to date are working in the Division, although it is hoped

that the fourteen remaining in the academic pipeline, over half of whom should be finished by August, 1983, will be retained by the Division. Both DAS and DASP have suffered the greatest loss of U.S. trained personnel to other GOZ agencies -- 17 from DAS and 8 from DASP. While the overwhelming majority continue to serve GOZ well in significant positions which exploit skills acquired in U.S. training, this rate of hemorrhage from the Service will, unless checked, destroy its chances of achieving project objectives.

Personnel management within the Service continues to be a problem, partly due to the loss of trained personnel. If the staffing were up to established levels, there would be enough people to do the "fire fighting" as well as the long-range planning. However, it must be noted that there is a lack of organized administrative support for Service activities and some reorganization is called for.

In terms of sustainability, there is no question that the Service is institutionally in the correct place to have the greatest influence. It is responsible to the Secretary General and the Commissaire of the DOA. This position is sustainable. The level of training and the ability to function of the Service is good, but it is not ultimately sustainable due to the rate of loss of trained people. The credibility of the Service is on dangerous ground, having a very inadequate data base to support the projects, analysis, strategy and planning. Budgetarily it is conceivable, if it continues to maintain an important position in the agricultural hierarchy, that the GOZ will either take over salary supplements as has been done in the Commissariat au Plan or shift the Service to a university research pay scale, which would also obviate the problem. Consideration will have to be given to backstopping the hardware and the software if the computer operations are to be sustainable.

II. BACKGROUND

The Agricultural Economic Development Project (052) is a successor to Project 050, Planning and Management Services. The Agricultural

Sector Studies Project (070) was designed to follow Project 052. The goal of Projects 052 and 070 has been to strengthen the capability of DADRE to develop and implement a rational strategy in agriculture. The goals differ slightly in their wording. The purpose of the two projects has been to raise the level of institutional capability of the Service d'Etudes et Planification, formerly the Bureau d'Etudes. This was to be done in the area of collection, processing, and analysis of data, formulation of policy and agricultural strategy and identification and evaluation of agricultural project proposals. Project 052 also included improvement of overall management, budgeting and planning in DADRE.

This sequence of projects is part of a long-term effort which started in 1972 with the Siffin Report, which identified four activities requiring attention in a program to institute agricultural economic research and analysis for public sector agricultural policy:

- 1) "fire fighting" response capability
- 2) project design and its evaluation
- 3) intermediate term research on investment choices
- 4) planning mechanism for continuous analysis.

Item 2 has been understood as the evaluation of project papers and not of project implementation.

Project 050 ran until 1977; 052 was scheduled to run for five years (1977 to 1982), and was evaluated in 1979. This resulted in a modified logframe, with the final input being scheduled for 1983, and with recommendations which led to the initiation of Project 070. This Agricultural Sector Studies Project started in July, 1981, and is scheduled to run for three years.

Under Project 050, the Bureau d'Etudes was created and attached to the Commissioner of Agriculture, the senior civil servant in DADRE. The Bureau was to assist in budget and its administration, project design, economic analysis, and agricultural statistics. Projects 052 and 070 both have two main inputs: a technical assistance team of

American specialists to advise DADRE and to organize and carry out specific tasks, including on-the-job training; and a comprehensive training program to establish a Zairian staff capable of agricultural planning and analysis.

The technical assistance under Project 052 was to be made up of a six person team provided by USDA. While this team was initially fielded at full strength, USDA encountered severe difficulties in recruiting replacements for the first three team members in Zaire whose terms ended. In view of this situation, the 1979 project evaluation recommended that given USDA's problems in providing U.S. technicians, and the unlikelihood that these could be overcome quickly in view of USDA personnel ceiling constraints, a new prime contractor, a university or a consulting firm, should be selected to provide the technical assistance component. As a result, a contract was eventually let to Pragma under Project 070. After replacing three of the members originally selected, the team is now at strength and fully operational.

Under the training component of Project 052, a total of 54 Zairians have been trained in the United States (see Table 1); the total number of scholarships awarded is in fact 55 since one participant received two -- one to complete the Master of Science and a second to complete a Doctorate. This in effect is the exact number proposed in the Project Paper, although five fewer went from the DAS and five more from the DASP than had been projected in the original PP. The 070 Project Paper contains provisions for training an additional 12 Zairian technicians in the U.S. and candidates have just begun to be selected. While the training under Project 052 temporarily decreased the capacity of DADRE to carry out planning and analytical work, this has ceased to be a problem per se now that two-thirds of Project 052 trainees have completed their programs and returned home. The critical problem which now faces the Service is the retention of these trainees -- a problem predicted but dealt with only in the assumptions sections of all previous project designs and evaluations. These assumptions were patently

TABLE 1
Summary of Activities/Assignments
of Personnel Trained under Project 052

<u>As of February 1983</u>	<u>Division of Agriculture Strategy and Planning</u>	<u>Division of Agriculture Statistics</u>	<u>TOTAL</u>
On the Job	6	5	11
Other DADRE Jobs	3	1	4
Other Government Jobs	4	5	9
Other Parastatal Orgs.	1	3	4
Preparing Master's Theses	7	---	7
Continuing Master's Studies in US	2	---	2
Studying Elsewhere	---	1	1
Studying for Ph.D.	4	---	4
Failed Master's studies	1	---	1
Working in Private Sector	1	2	3
Working for International Organization	1	---	1
Deserted	<u>3 §</u>	<u>4 §§</u>	<u>7</u>
TOTAL	33	21	54

§Of whom 2 failed the Master's program,
 §§Of whom 2 failed the I.S.P.C. program,

wishful thinking. Corrective action is now imperative to realize the institution building and productive output components of these projects.

In summary, Project 052 has evolved essentially as planned with the major exception being that the original USDA technical assistance team was replaced with the Pragma team under Project 070. Project 070, after experiencing initial difficulties in the selection of U.S. contract technicians, is making good progress on its Statement of Work midway through its contract period. The impact of both projects has been more profound on the DASP than it has the DAS. Some of this is caused by logistics. The office of the Director is housed with DASP as are three of the four Pragma team members, a Belgian and a French technician. The DAS is located some two blocks away and at present has no foreign technicians available to assist and train Zairian staff. In part, this situation will be rectified by the assignment in April, 1983, of Dr. Frazier of the Pragma team to that Division and building. Fortunately, the gap left at DAS by the departure of the previous FAO advisor some months ago may soon be filled -- a junior expert has just arrived in Zaire and a senior expert is still being sought. There is no doubt that job satisfaction in the Service is significantly increased by the teaching and on-the-job training provided by foreign technicians.

GOZ has expressed its support of the Service through the structural reorganization mentioned above, through the improvement and expansion of office space, through the addition of two new divisions and the doubling of personnel to a total of 133 - the largest Direction in DADRE. Moreover, Z5,000,000 has been committed to conduct a census. These actions provide solid evidence of GOZ's commitment to this undertaking and of the basic agreement between GOZ and USAID on the value and significance of this project to the country's agricultural development efforts.

III. EVALUATION METHODOLOGY

Three evaluations of Project 070 were planned in the Project Paper. The first in-depth evaluation was scheduled after the first year; i.e., in July, 1982. An interim evaluation was proposed after the second year, i.e., July, 1983, and a final evaluation upon scheduled completion in July, 1984. According to the Statement of Work for the evaluators, this evaluation is to "serve as a mid-term design evaluation" and "the evaluators will suggest design modifications of Project 070 as may be appropriate." The Project Paper called for a joint USAID/GOZ team composed of qualified sector planning experts; the team was composed of an agricultural economist, Dr. Wilford Morris, who has considerable experience in gathering and analyzing data in Sub-Saharan Africa and in designing and evaluating agricultural sector projects and Dr. William Rideout, a specialist in education and human resources development with long experience in Africa and in Zaire. The evaluation of Project 070 was made jointly with the final evaluation of the precursor Project 052. It was made in close collaboration with the project manager in USAID, the project director, Citoyen Mubenga Mukendi, and the Pragma team leader.

In carrying out the evaluation of an institution building project, the cost/benefit method was not considered appropriate. The Project Evaluation Summary format was followed. A complete review was made of the logistical framework, including revisions, and the underlying assumptions.

The data used came from the project files, project reports including the contractors reports, documents prepared by the Service d'Etudes et Planification, interviews with others as required by the Statement of Work, including Professor Thompson of the University of Georgia who is supervising final participant theses under the Project 052 SECID contract, Pragma team members, Division and Bureau chiefs in the Service d'Etudes et Planification, returned participants, appropriate members of USAID/Kinshasa and representatives of the Belgian and FAO missions in Zaire.

IV. DISCUSSION AND FINDINGS

A. Training

A major input in Project 052 was the proposed training of 53 students at the Master of Science level in Statistics, in Agricultural Economics or in Business Administration and 2 doctorates. This effort is continued in Project 070 with 10 Master of Science and 2 doctoral scholarships. However, the training activity under Project 052 has not yet been fully completed: seven participants are presently preparing theses in Zaire under the supervision of Professor Thompson, University of Georgia. They are all expected to have completed writing their theses prior to his departure in August, 1983, although degrees may not have actually been awarded until later in the year. Two others are completing Master's degrees in the United States and should be finished by August, 1983. Of the doctoral candidates, two on project funds and two funded by the institutions they are attending, one is expected to complete his doctorate by September, 1983, and the others by the end of 1984. One additional student is studying for a post-graduate degree in Belgium under Belgian funding, but neither his program nor his date of completion is known. Overall, therefore, the project continues to have 14, about 25% of the total, in the academic pipeline, 11 of whom continue to be project funded and of those, an estimated 10 are expected to have returned to their jobs in the Service by the end of the year (See Table 1, page 6).

1. Participant Processing and Placement:

Under the SECID contract, USAID relinquished final determination on placement of project participants to the contractor: once the level of English language training was adequate, the students were placed where possible given their academic records, their areas of specialization and their TOEFL scores. While this was expedient, it may well not have resulted in the most suitable participants being chosen nor in selection of the best overall institutions and academic programs consistent with project goals.

At the end of ELT, often lasting six months or more, placement became a key determinant for those who were found to have unimpressive or deficient academic dossiers. This is not meant as a criticism of SECID -- they did not recruit the participants and had not pre-screened them for academic admissability -- they simply did their best to place them and they successfully placed all candidates.

What the modus operandi cost the project financially (in terms of excessive time spent in ELT in the U.S. and in extended university degree programs), scholasticly (perhaps in terms of compromised academic standards, quality and relevance of programs), and in terms of participant attrition (see below -- those who failed overwhelmingly deserted) cannot be determined in monetary terms. However, it clear that ELT could be reduced to three months -- a savings of 50% at least - while the academic programs in the U.S. should be completed within a maximum of 1 1/2 to 2 years beyond the ELT. In fact, under Project 052, many have taken up to three years (See Annex, Tables 3 and 4). These considerations are serious enough to warrant a revision of future training activities and those which will occur immediately under Project 070. Therefore, the following procedures are strongly recommended.

a) As soon as the participants are recommended in Zaire to begin their English training, their academic records should be forwarded to contracting institutions to determine the academic acceptability of the candidates. This would not commit any institution to accept the students before they had met other admission criteria, essentially the level of English language capability required, but it would provide a sound basis for determining if proposed participants would be admissable to the kinds of programs which GOZ/USAID most wanted them to attend. It is clear from project files that a major reason why the academic goals of the DAS were lowered from 10 Masters

of Science in Statistics (there was one) and 15 Masters of Statistics (Census Bureau) (there were five) (See Annex, Tables 4 and 5) was that most of the candidates couldn't meet and/or handle the academic requirements and programs. They completed instead the ISPC Diploma, often with additional courses, so that basic training objectives were achieved but not the degree objectives. Therefore, while this project was originally intended to produce only technicians with Masters or Doctorates, in fact 12 were tracked into just the ISPC Diploma program. If academic credentials had been received by U.S. institutions prior to their departure and supported perhaps by some appropriate tests (especially for quantitative aptitude abilities), the students might have been selectioned out prior to departure or USAID might have itself directly influenced the configuration of alternative (and perhaps degree) programs.

b) As recommended in Dr. Frazier's report and in project papers, it is considered undesirable to send participants into English language training until they have spent at least one year full-time on-the-job in the Service.

c) Given the English language facilities available in Kinshasa, it is strongly recommended that USAID in the future not send participants until they have scored close to 500 in the TOEFL prior to being sent to the United States. In the U.S., ELT should not exceed three months.

d) Where possible, it is recommended that ELT be provided at the institution in the U.S. at which the student will ultimately be placed so that in conjunction with the language program it may be possible for the students to begin to audit or enroll in at least one basic class in their areas of specialization at the university. This has been found to stimulate the English learning process, to make clear to the students how they are progressing, vis-à-vis their ability to perform in a real classroom situation, to point out the

problem areas in their language learning, and to promote the acquisition of vocabulary in their areas of specialization. If language training cannot be done at the institution at which they are slated to attend, then at least one course relevant to their subject matter area should be made available in addition to their English language training.

e) It would be highly desirable to have alternates named to the program so that if difficulties are found in the acceptability of their academic records or in their progress in achieving an acceptable English language score, it would be possible to send only those of known quality academically and linguistically, and thus reduce the likelihood of failure in the U.S. It is recognized that alternates were difficult to request and obtain under Project 052 as the number being processed reduced the manpower pool within the two divisions to a skeletal minimum. However, with the majority of Project 052 trainees back in Zaire, and with the number being sent under Project 070 only about one-fifth of the number funded under Project 052, the request that alternates be provided should not create undue stress on the Service's operations. Furthermore, alternates who learn English but do not ultimately go to the United States on training can put their knowledge of English to good use in their research activities under the project. However, if alternates are not named by the Service, then it should be made clear that those recommended for U.S. training will only be finally selected once their academic records have been favorably reviewed by U.S. institutions and their TOEFL scores have reached 500.

f) If contracting for academic services continues to be through a consortium like SECID, USAID should retain the right of final approval of the institution and program in which participants will be placed. This would be an important quality program control measure. All institutions and programs are not equal.

g) Universities or training institutions should be advised when the participants enroll that it is anticipated that they will receive their degrees within 1 1/2 to 2 years. If the universities and/or training institutions think it will take longer, they should immediately advise the Mission about how much longer the program will take and submit to the Mission a detailed outline of the entire degree program of studies. The Mission is then in a position beforehand to concur or transfer the participants. This initial processing might occur when students' records are being given a preliminary evaluation. Easier still would be to have this understanding on duration of studies included in the contractual arrangement with the training institutions. Where exceptional problems arise in the course of any student's program, the Mission would decide on its course of action on a case-by-case basis as has traditionally been done.

h) The student progress reports submitted to the Mission were thorough and appeared conscientiously prepared. The only problem appeared to be a reluctance to face squarely and promptly the fact that students were not performing adequately. In such cases prompt remedial action should be taken before eventual failures became inevitable -- some of them might have been avoided. If remedial efforts fail, the candidates should be returned promptly and they should clearly understand this could happen prior to leaving Zaire.

i) As soon as the academic program begins, faculty advisors should be encouraged to work closely with the participants to determine in the shortest possible time their thesis topics so that programs can be most effectively oriented toward thesis preparation in terms of both content and methodology.

j) While previous project design and evaluation documents have indicated or stated a commitment on the part of participants to return to their pre-departure Service jobs, we have found no evidence that any commitment, other than a moral one, exists. Therefore, even though the most recent evaluation of Project 052, submitted in 1979,

states, "there is a danger that U.S.-trained staff members will leave government after their period of obligation or transfer before that time to another government agency," there is nothing in fact to substantiate the existence of any "period of obligation" having been officially established.

It is our opinion that in fact a period of obligatory service would be beneficial to the project and it should be equal to the time spent in training abroad. This concept is known and has existed in Zaire. However, it should be pointed out that this will not guarantee job performance; unless salaries meet the wage levels needed even to live modestly, civil servants will hold as many jobs as possible, both in the public and the private sectors, appearing as possible and when possible at each. Therefore, compulsory service is not the answer, but it would be a tool for retaining returnees while necessary salary adjustments were accomplished. The moral commitment, it should be added, does exist and we think has functioned as a mechanism to delay departure. Understandably, however, it dissipates under the pervasive demands of everyday life.

2. University or Other Institutional Contractors

The mission has fully achieved its Project 052 training target of 55 technical training programs in the U.S. Through contractual arrangements, SECID has overseen the project, but its successful implementation has been much more the result of the commitment of the University of Georgia and the continuity of administration and academic guidance provided especially by Professors Thompson and Ames. The project very astutely required that those pursuing Master's degrees return to Zaire to accomplish their field research and write-up under the supervision of a designated faculty member -- a task most commendably and capably accomplished by Professor Thompson.

While this commitment to require in-Zaire theses was accepted by SECID, and purportedly agreed to by its constituent

members, a number of participating institutions subsequently refused to abide by this specification on grounds that it was difficult, inconvenient, could not be imposed uniquely on Zairian students when others were not required to write theses, or they could not permit their students to be supervised by a professor from another institution. This failure to comply with contract commitments is unacceptable:

-- they either are members of the consortium and agree to abide by contracts let in its name or they bid as separate institutions with their own specific criteria. In short, they can't have it both ways, benefitting from the consortium's scope and influence to acquire contracts and then doing exactly as they please regardless of contract specifications.

The University of Florida was especially flagrant in its violation of the in-Zaire thesis requirement. After having agreed to accept three students from Zaire on condition that they return home to do their theses, the University of Florida subsequently reneged (they claimed they could not ask something of the Zairians that they would not ask of their other students). Consequently, Zairians completing their programs there prepared theses in the U.S. of little, if any, value (and perhaps even dysfunctional) vis-à-vis future research and agricultural development in Zaire. Some other institutions simply permitted the students to elect for a non-thesis option -- again in spite of specific contract requirements.

The theses being done in Zaire are providing information of significant value to a country practically paralyzed in rural development efforts for lack of reliable data and relevant research. These theses being produced are a very important contribution - output - of this project.

3. Theses Distribution

Given the value of project theses to Zairian agricultural research and analysis, and based upon a review of several of the

theses now available in Kinshasa, it is our strong opinion that five copies of each thesis should be collected by the University of Georgia and sent to the project for distribution as follows:

- a) USAID Documentation
- b) Bureau of Documentation in the Direction
- c) Pragma Project Office
- d) Bureau of Research in the Direction
- e) Agricultural Faculty at Yangambi

4. Participant Job Placement and Activities

Of the 33 (60%) who have returned to work, excluding those who are finishing degree research in Zaire, 12 are in the Service (seven in DASP and five in DAS), four in other DADRE units, nine working for ministries other than agriculture (six are in the Commissariat au Plan) and four are working for parastatal organizations. Of the remaining who have returned, three are now working in the private sector and one for an international organization (UNICEF).

In addition, seven (about 13%) have "deserted" -- two failed their ISPC programs and illegally remain in the U.S.; one completed his degree and requested political asylum; two did not complete their degrees and their cases have been turned over to American Immigration Authorities; one failed the combined MS-ISPC program, although he successfully completed the ISPC portion, and he is now reportedly in Italy. The final one completed the ISPC program and illegally remained in the United States.

There is obviously a powerful correlation between academic failure and failure to return home among this group; only one who "flunked out" returned. A breakdown of the status of participants

in each of the two divisions is presented in the Annex, Tables 2 and 3. A more detailed review of the training and present occupation profiles of individual participants may be found in the Annex, Tables 4 and 5.

The loss of seven out of 54 does not appear to be excessive in view of training programs either elsewhere in Africa or worldwide. We will not, therefore, focus on that aspect except to note that where failure is apparent, special efforts should be made to remedy the academic situation promptly and if that fails to assure repatriation as soon as possible.

5. Relevance of Training

Of those who have returned home, the work they are accomplishing in the Service is well regarded; those who have transferred to other sections of DADRE are impressively placed; those in parastatal organizations are, with perhaps one exception, applying what they have learned and are satisfying manpower needs within those organizations, most of which are national banking institutions directly involved with development programs. Only three have entered the private sector, in spite of the much more attractive pay scales available there. In short, the former participants are, with very few exceptions, performing for the GOZ the kinds of tasks for which they were trained. This speaks well for the overall project design; it also indicates the value attached to their programs in the United States (degree as well as non-degree) and to their English language training.

While there has been some criticism that U.S. training has been too theoretical, this appears to have been remedied by the in-Zaire thesis requirement and by on-the-job training both pre-departure and post-return provided by senior GOZ officials and by the Pragma team under Project 070. The latter appears to be extremely important in helping the Service to achieve its stride -- the type of function to be performed by this Service has no precedent in Zaire -- no functioning or historical model to emulate. Therefore, the fully

effective and efficient model must be completely created from the foundation up. It is submitted that the Pragma team can and should make a major contribution to this effort.

6. Demand for Trained Technicians

While there is little question about the relevance and value of the training per se, the project faces a serious problem in terms of retaining an adequate number to enable the Service itself to achieve its immediate as well as long range planning and institutional development goals. The problem of retention which must be considered in this context is neither new nor unexpected: It was acknowledged by the original Project Paper assumption of a "high retention rate." It was flagged again in the 1979 evaluation when it was assumed that "U.S.-trained Zairians can be retained with incentives until (the) salary system (is) reformed." It has been mentioned as a problem repeatedly in project file papers. It was temporarily addressed by the Mission's establishment of a salary premium in mid-1981 -- but the problem was only solved temporarily.

Our findings are that returnees overwhelmingly wish to remain with the Service; they feel a commitment to the project and its goals, but unless their jobs provide them with an income adequate to live on they will have no choice but to go elsewhere in pursuit of higher incomes. As the remaining 14 complete their academic training and as 12 more undertake training under Project 070, it is absolutely essential to the present project design that all of them resume their positions in the Service afterwards and that those who have already returned to work remain. The attrition rate since trainees began to return in 1978 has been approximately one person every 2 1/2 months. At this rate, the Service will obviously become debilitated through the loss of its U.S.-trained technicians in the not too distant future. If the project is to succeed in assisting the GOZ to build a viable institution to promote agricultural

research, policy and planning analyses, action must be taken immediately to deal with the retention problem. Otherwise, the project will have more simply been a well designed training program divorced from targeted institution building in support of agriculture.

If the Service can retain technicians still in training under Project 052, it appears it will be capable of meeting its basic anticipated manpower needs within the original two divisions of the Service -- DASP and DAS. However, this will not permit the Service to respond to the government's request to prepare technicians for assignments to assist the regions in decentralized planning so that future goals and priorities will be congruent with regional assessments of developmental needs. It is anticipated that practically the entire training component authorized by Project 070 (12) would be absorbed in meeting and servicing technicians who will be assigned to each region. In addition, consideration must begin to be given to the amount of training which USAID will provide to rebuild the third division in the Service, the Division of Agricultural and Animal Science Research and Training, and eventually the fourth, recently added and still being conceptualized, the Division of Rural Development Strategy and Planning. It appears, in summary, that even with 100% retention (which, of course, is impossible) future training needs will exceed those available from Project 052 and those authorized by Project 070. In fact, it should be noted that returnees being promoted up and out of the Service should receive support and approval. Transfers laterally should be strongly resisted and combatted with competitive remunerations.

7. The Problem of Retention

The greatest loss of project trained personnel has been to other government services -- four to other Directions in DADRE, six to the Commissariat au Plan, one to the Commissariat of Sports and Leisure and one to the University of Lubumbashi. In some cases, the moves to

other ministries constituted a promotion, which is understandable, and in all cases, and most assuredly for the four who went to work for parastatal organizations, the attraction was basically significantly higher wages, although there was no change in grade level between their previous job in the Service and their new jobs elsewhere in the government. While the official salary schedule within the civil service remains the same for all employees according to grade, the premiums which different ministries manage to provide to their personnel from other budgetary sources under the control of individual departments make final salaries available substantially (and sometimes grossly) different. For example, participants returning to their jobs in the Service earn between 1,500 and 1,800 Zaires per month in total salary, which includes a premium presently made available by USAID to the DASP and DAS divisions presently included in the project. Those at the same grade working at Plan receive between 3,000 and 4,000 Zaires -- or roughly twice the amount as those remaining at the Service. Given these circumstances, and the fact that modest rent and transportation costs average 1,000 Zaires per month, it is patently apparent why Plan has managed to attract returned project technicians. Furthermore, four additional returnees who had been recruited by the Plan had their pending transfers cancelled only after strong protests were made by officials in the Service. In all probability, however, this constitutes only a temporary "holding action" effort.

Given the salary levels available without the payment of premiums, it is inevitable that those who cannot obtain higher paying jobs, in or out of government, end up occupying two and sometimes three "full-time" jobs in order to survive. Obviously, this means lack of work discipline -- people not showing up, leaving early, etc. Or, if the individuals are lucky, they can also work on a separately donor-funded project which provides them with premiums but which also fit with their regular jobs so that they manage to

keep a semblance of "normal" full-time working hours without sacrificing salary supplements their families require.

Obviously, the concept of paying premiums to supplement government salaries is repulsive to donors -- in terms of sustainability it is anathema. However, without these subsidies, the entire structure which has been built in the Service over the past decade or so through Projects 050, 052 and 070 will disintegrate, even though it means that the GOZ, albeit perhaps unintentionally, is participating in the destruction of units it too is seeking to support and expand. However, it is clear that the premium system is so necessary and so deeply entrenched that it would appear to be impossible for the GOZ to summarily disband it.

It is recommended, therefore, that in order to preserve the project's investments to date, USAID take two courses of action. First, to protect and stimulate the project and the Service, the premium being paid by Plan should be matched for the Divisions of the Service supported by USAID projects and the premiums should be reviewed every six months to determine that they remain competitive. The Mission should continue, as it does now, to make certain that the premium is merited -- if the technicians are not performing adequately, the premium is not paid. At the same time, in order to build in the sustainability critical to perpetuation of the institution once USAID support has ceased, the Mission should seek to get the GOZ to increase its salary contributions to the Service as quickly as possible. For the long-term, the Mission is urged to support the efforts to have the Service assigned to the pay scale which presently exists for university research institutes. If the Service were presently included on that pay scale, it would not be necessary to pay a premium. With the rapid growth of highly skilled and trained technicians in the Service, including the potentially growing numbers of Ph.D.s, the basis for making such appeal is increasingly powerful. This would provide long-term sustainability and if the

effort to acquire a new pay scale did not succeed, the GOZ might at least come up with an alternative which would provide the same type of long-range sustainability.

8. Future U.S. Training

For future training in the United States under ongoing projects, we are strongly of the opinion that the thesis in Zaire requirement be maintained and that this also be extended to research conducted for doctoral dissertations as well. The academic advisory function performed by Professor Thompson has been essential to this requirement under Project 052 and a similar arrangement should be made for an equally qualified professor to return to Zaire to supervise theses when the bulk of Project 070 participants begin to return for their field research. Not only do they master through experience how to do research at home with the research data and facilities available (i.e., doing the kind of research in the environment in which they will conduct their careers), but at the same time they are gradually cycled back into the functions of the Service since research office space and back-up facilities are available to them there and since that is where their supervising professor is housed.

It is also recommended that the Mission give prompt consideration to funding the in-Zaire dissertation research of the two project-funded MS students who are completing their doctorates in Canada and the US under the funding of their respective universities. This would provide valuable new data at an extremely low cost and would serve to bridge the return of these two scholars to the Service.

9. Short-Term In-Country Training

In addressing this question, we find the recommendation made by Dr. Frazier to be sound. He noted that at present Service personnel in DASP and DAS may be overtrained in course-type programs; in fact, what is really needed is short-term problem-solving hands-on

training packages preferably done over time so as to assure performance. To ascertain what is needed, Bureau and Division Chiefs, as well as Pragma team members should be polled quarterly and programs designed accordingly to respond to the experienced needs. The types of programs the Mission has supported recently are undoubtedly helpful, but in terms of priority they have not significantly addressed the daily problems Service technicians must face.

B. Assessment of the DAS

An agricultural statistics reporting service is found in almost all Departments of Agriculture in Africa. In 1975, before activation of Project 052, DADRE committed itself to an area frame sampling system as a basis for gathering representative statistics. The priorities were (1) basic data on crop and livestock production; (2) other economic and demographic data for analytical and policy purposes; and (3) special studies. The area frame sample for Bandundu was to be completed in 1976, and for the country in 1977, and enumeration was scheduled in Bandundu in January, 1977.

The "primary goal of the 052 project purpose (for the DAS) is to assist the GOZ to provide the skills necessary for the building, planning and operation of a data system for Zaire which will produce the best possible current information on a continuous basis. This information is required to serve as a basis for analysis and policy formulation in the development of the agricultural sector." The second priority of the project purpose for DAS is "a functioning data system which is fully staffed by local technicians."

The area frame sample is now available for all regions but Shaba. The USDA Statistical Reporting Service is reported to have the sample for Shaba or to have the data on which it was to be based. The development of the sample was assisted by Zairians, French, FAO and SRS Advisors. The 052 project paper states that it has "provided a useful basis of training" with which we concur. However, after eight years, with eight man-years of U.S. technical

assistance under Project 052, and probably 8-12 years of technical assistance of other donors (FAO and France), plus 1 1/2 years of technical assistance from Project 070, and with 21 technicians sent to the U.S. for graduate study, the DAS has produced almost no valid quantitative data on the agricultural sector and is in no condition either to implement or to administer an agricultural census to produce quality data in Zaire. Furthermore, the actions which we see proposed with the DAS will perhaps improve its administrative capability

but will not enable it to gather systematic data useful as a basis for economic analysis, design of projects or planning. Thus, unless something radical is done, 12 years of technical assistance (1972 - 1984) with all the traineeships to the Service of Studies and Planning will have produced a series of documents with no viable data for bases, like a castle built on quicksand or a tree with no roots. The 12 years and three projects will then have to be considered a training effort with little usable output because it was not built on a solid foundation of data.

There is sound evidence that if USAID were to propose a way in which a valid agricultural census could be made that the FAO[§] and other donors would assist in the activity; the GOZ, furthermore, has already budgeted Z5,000,000 in 1983 towards the census proposed by the DAS. A census is being conducted in Rwanda with USAID, Belgian and Rwandan support and with US Bureau of Census and Belgian technical assistance. Rwanda has about a million farms compared with three to three and a half million in the much larger Zaire.

Any measures to gather agricultural data using the methodology used by SCAD at the North Shaba Project would be unlikely to result in a valid statistical basis for the Service.

[§] For example, the FAO would probably provide a senior expert in addition to the junior expert on site under Project ZAI/008/073.

It is interesting to note that project evaluations and papers have almost invariably mentioned the problem of a viable base of agricultural statistics. It looked as if the FAO and Project 052 were poised to deliver but the census eluded them, probably due to the failure on the part of the GOZ to support the project financially. In Project 070 the emphasis of technical assistance has been placed on the DASP.

The Project 052 EOPS for the DAS are:

- It will be fully staffed by Zairians with advanced degrees in statistics and systems science. Only five people remain from the 22 sent to the U.S. for training;

- The DAS will be fully capable of managing, improving and extending the data system developed during the project life. It is not capable of managing, improving or extending the data system foreseen; nor has the data system been developed during the project life;

- Overall frame defined and constructed and the sample designed. This was to have been done in 1977; it has been reported to be complete now except for the Region of Shaba;

- Many of the basic surveys conducted and the results tabulated and published. Two small surveys have been made by DAS staff. The Bandundu survey of 1,080 farms obtained a 75% response and the validity of the data is not good. Absolute values will not be published. Nothing approaching a census has been produced, and there are no accurate production figures from these surveys; and

- Surveys, tabulations and publications will occur on a periodic basis and will be responsive to the needs of other divisions in the DOA, especially Program and Studies. This has not taken place.

Project 070 has the following conditions that will indicate achievement of EOPS:

- improved operational linkages between DAS and DASP. This did not take place with Mr. Kulp as the expatriate technician but is expected to occur with Dr. Frazier;

- improved administrative and accounting procedures in the DAS. The situation is the same as above;

- institutionalized collection of agricultural statistics that accurately reflect performance of the agricultural sector. This has not taken place and is unlikely to take place during this project. This problem is covered under Recommendations; and

- retention of Project 052 participants.

C. Assessment of the DASP

1. The Bureau of Agro-Economic Analysis

Project 052 expected this Bureau to produce a series of agricultural situation analyses by commodity, region and technology, using a continuous flow of data from the statistical data system. The reports were to include costs of production, supply and demand, price analysis, credit and financial requirements and human and physical resource requirements. These reports were to provide the basis for the planning section and the data needs for the reports were to be defined in close collaboration with the DAS.

A training need for 8 MS and 1 Ph.D. was identified, together with a basic collection of books. Desks, portable calculators and other necessary equipment were to be supplied.

The EOPS specified:

- Six MS students in place with 2 more MS and 1 Ph.D. candidates doing their thesis research in Zaire;

- A regular flow of research, including reports on crops, human resource problems and the impact on small farmer groups; and

- A reasonably comprehensive and quantified agricultural sector analysis with most of the analytical work done by the Zairians. X

Project 070 requires as project outputs:

- Completed studies on some major agricultural commodities;
- Completion of long-term and short-term studies of the good crop marketing systems in Zaire, identifying ways of strengthening the market mechanism to benefit the small farmers; and
- A policy paper identifying options based on data collected with reference to pricing market mechanisms and project development.

Accomplishments

The first of the sector studies, on rice, is available. Several other studies are in various states of completion. The whole series, and indeed all the activities of the Economic Analysis Bureau, are greatly weakened by the almost total absence of output from the DAS and, until this is resolved, the EOPS for this Bureau will not satisfactorily be met. There is also an additional problem -- the quality, analysis and depth of the rice report and of the reports in progress leave a lot to be desired.

Furthermore, if, as proposed in Project 052, the Chef de Bureau had a Ph.D., it would require a U.S. technician with Ph.D. training to work with him. The present incumbent, Mr. Condé, is an experienced technician with a B.S. in agricultural economics.

It is difficult to say how far this bureau should have gone in achieving its EOPS with the absence of data inputs assumed to come from DAS. In any case, it needs additional technical support to strengthen the analytical capability of the bureau; such support is

available in the Pragma team, particularly from Dr. Chan Nguyen and Dr. George Frazier.

2. The Bureau of Project Development and Evaluation of Project Proposals

In the design of Project 052, project monitoring and evaluation was a clearly stated activity and there was and is a real gain from having the group involved in the presentation and evaluation of project papers required to be responsible for the systematic monitoring and evaluation of projects. In fact, although this was never accomplished, members of the Bureau of Project Development and Evaluation of Project Proposals (hereafter also referred to as simply the Bureau of Projects) are often involved as members of evaluation teams, which is better than no involvement. The original 052 project design, however, was aiming towards a more systematic and continuous process, as outlined for example in the "Handbook on Monitoring and Evaluation of Agricultural and Rural Development Projects" by J.J. Casley and D. A. Lury of the IBRD Agriculture and Rural Development Department (Nov., 1981) or "Monitoring Systems for Agricultural and Rural Development Projects" edited by E. Clayton and F. Petry, FAO Economic and Social Development Paper 12 En.*

In a recent reorganization, DADRE assigned project monitoring and evaluation to a separate new Direction of Project Administration.

In fact, since the Direction of Project Administration has a great shortage of trained personnel, the Bureau of Projects is still called upon to man evaluations on the Zairian side.

Project 070 calls for an institutionalization of project identification, design, monitoring, and evaluation. This fits the GOZ frame of reference; in the last two years the practice of the GOZ accepting donors' projects without much question has been abandoned and personnel from the Bureau of Projects accompany design teams and the

* There is a French version, using different case studies, which does not seem to be as good as the English.

Bureau is asked to evaluate the proposals. The recommendations of the Bureau are then passed through the Commissaire of DOA to the Executive Council. It is not clear how far these processes can be institutionalized. There have been short courses on project design and evaluation by Project 068, Development Manpower Training. There are handbooks by USAID, IBRD and DAC/OECD on various aspects of project identification, design, appraisal and monitoring and evaluation. Each donor agency has its own system. So we consider "institutionalization" in this case to mean developing the capacity of the Bureau of Projects to perform the tasks of project identification, design and of evaluation of project papers. This is not to exclude preparing check lists for developing a familiarity with the systems used by different donors.

Apart from the problems of change in personnel, i.e., trained technicians going to the U.S. for MS studies and people with Masters Degrees leaving the Bureau for better paying jobs, the Bureau seems to be functioning well. Here again, the capacity to "institutionalize" depends on a capacity to retain trained personnel.

Project 052, in its EOPS, requires:

- a high degree of Zairian participation in project design; this has been diluted by the losses in personnel referred to above;

- establishment of a periodic reporting system for projects; a review of all the projects in agriculture was published by the Bureau, but this job is now the responsibility of the Direction of Project Administration;

- integration of a projects policy into an overall analytical and planning framework. This was not accomplished under Project 052, but it will, in fact be substantially accomplished if Project 070 continues its progress;

- Zairian participation in project evaluation resulting in experience for improving project design, management, and selection;

This was not accomplished under 052, and is not appropriate now that the Direction of Project Administration is in place. However, the Bureau is likely to have to lend personnel to the Direction and under Project 070 some degree of satisfying this EOPS will take place;

- development of an overall projects policy that enables the GOZ to increase its role in project conception. This is probably on the way; it requires the existence of a plan and a policy and, ideally, a Bureau of Economic Analysis capable of identifying constraints in the agriculture sector. The GOZ policy of participation of the Bureau in project design and in the evaluation of project papers, instituted in 1980, largely satisfies this EOPS in terms of design and evaluation; when the capacity exists for conception this can also be exercised; and

- return to Bureau of Projects of Zairian trainees. See discussion of staffing problems.

3. The Bureau of Agricultural Planning

The 052 Project Paper proposes a comprehensive planning system to replace the project by project system, where the GOZ accepted the projects offered by the donors. The concept, stated by Siffin and in the 052 Project Paper, that "Agriculture sector planning relates to the estimation of the consequences of alternative policy, program and project options as related to a multiple set of goals," is still not an attainable goal in Project 070 because of the lack of data on which to base the estimation. Quantitative planning cannot yet replace expert judgement, particularly in the current situation in Zaire where several different estimates exist for the same statistic, with no means of telling which, if any, is correct. The called for coordination with the statistics division on the types of data needed for planning framework is also fruitless.

The EOPS of Project 052 are:

- annual sector reviews and plans on schedule. This was not realized, but the first sector review, "Situation Actuelle de l'Agriculture Zairoise," a 331 page document which has been published under Project 070, is, considering the data base, a formidable piece of work. Its author, Dr. Chan Nguyen, recognizes the limitations of the work in a quantitative sense;

- projects selected that clearly address constraints that are identified in the planning framework. This is probably incorrectly stated since the Bureau of Agro-Economic Analysis is supposed to identify the constraints analytically, and, since it has not done so, this EOPS has not been attained. Under Project 070 the project selection process (in the Bureau of Projects) has been improved;

- trainees sent and returned. See discussion on staffing; and

- long-term (5-10 year) agriculture sector plans in the initial phase of development. The Bureau, under Project 070, participated in the "Plan de Relance Agricole 1982-1984" and is now engaged, in collaboration with the Commissariat au Plan, in developing a five-year plan. However, there was little accomplishment in this direction under Project 052.

Under Project 070 strengthened linkages with the Commissariat au Plan's Division of Regional Planning and Development is taking place. However, if this is to be fully successful, more technical assistance will be required to do the liaison with the nine regional planning entities and Bureau personnel located in the regions.

Regular quarterly meetings with representatives from the Plan is a specified EOPS. These meetings occur two or three times a month.

Project 070 also proposes institutionalization of an annual planning mechanism that will: highlight the performance over the last year; present the coming year's program; and flag problem areas that need attention.

In addition, Project 070 requires an improved quality and degree of planning that reflects the priorities of the agricultural sector and policy and planning documents discussing pricing policy, market mechanisms, and project development. Any serious quantitative approach has to await the development of capacity in the DAS to do its job. The performance of the agriculture sector is still hypothetical. Some attempt is being made to work on pricing policy and the Executive Council has freed the prices of many foods; but as far as we can see, the result on the income of the producer is very small, in spite of prices in the cities (e.g., Kinshasa) keeping pace with inflation, or perhaps contributing to inflation. The priority areas of agriculture still appear to be selected by judgement and without regard for economic efficiency; that is to exercise the comparative advantage^s that may exist. However, a policy to increase the production of:

- a) major food crops, i.e., import substitution,
- b) crops suitable for industrial processing in Zaire, also import substitution, and
- c) export crops

certainly includes all the major possibilities.

Project 070 calls for the review of the ten-year agricultural strategy paper. The preparation of the 1985-1989 agriculture plan is underway and will serve as an important initial step towards future agricultural strategy. The project also calls for discussion of a program of public investment for the years 1983-1985; the Bureau contributed towards the preparation of the agriculture sector plan 1982-1984 and is working on the 1985-1989 plan. These serve as a basis for discussion of public as well as donor investment. Sooner or later, the program will be held up for lack of valid data.

The last technical EOPS in Project 070 is that senior level government personnel will more actively rely on planning and analytical

information. As far as planning is concerned, this is certainly the case. However, the analytical/information is not yet available, mainly because the DAS has not produced the data.

D. Project Management

The management structure of Project 052 is no longer visible, but that of Project 070 can be examined. The EOPS requires improved administrative and accounting procedures in the DAS and the DASP. Presumably this should now be expanded to include the office of the ~~Director~~ and the other Divisions in the Service in which the project is involved (e.g., Division of Agricultural and Animal Science Research and Training),

In the first place, it should be noted that DADRE itself is called upon to respond to a series of unplanned and urgent requests from the Executive Council. In this environment, as had been noticed in Project 052 as well as in Projects 050 and 070, there is a lot of time spent in "fighting fires" to the detriment of any scheduled calendar of work. To this must be added the demands placed by USAID on the Service, sometimes at short notice, to do various tasks, some in distant areas. Under these circumstances real "management" of personnel and the workload becomes almost impossible, particularly when the Service is short of staff.

The difficulties of the situation are clear but at least if USAID requires improved personnel management it should not contribute to the firefighting problem. USAID's needs for assistance from the Service for work concerned with other USAID projects should be planned.

A second form of behavior by USAID also seems to the evaluators to be counterproductive: a delay in sending trainees to the U.S. until certain conditions precedent, not stated in the project documents, have been fulfilled. Once this hold-up was apparently connected with a requirement that prior to any additional departures

three Zairian trainees who had disappeared in Washington, D.C., had to be returned home; there are procedures by which the GOZ can request that the FBI return their students if they abandon their programs, but these procedures were not used. Beyond this, GOZ is in a helpless situation -- there is nothing they can do. Most recently, USAID was concerned with provision of a Zairian technician for the North Shaba Project requiring that the Director of the Service should give first priority to this need, while still holding him and the Pragma team leader responsible for the conduct of Project 070, which includes a requirement of improved management.

In the management area, the GOZ contract for Miss Thompson presents a problem; she is filling a position described in the Project Paper and is in the chain of command of the Pragma project leadership. She serves also as an assistant to the Director of the Service. The evaluators recognize that the situation arose because at one time Pragma declined to take care of obtaining a local hire for the job. Miss Thompson is administratively responsible to the Pragma team leader; this would not stop the Director from making requests for her services, just as he does for the services of other people in the Service. This is particularly important as Pragma will hire a short-term technician to train Zairians in administrative systems. Otherwise, a real split is likely to occur in the office to the detriment of performance.

The evaluators were informed by the USAID Controller (Kinshasa) that he proposed to intervene in the accounting procedures to bring them into line with those of USAID. We support this action.

The method of document and book acquisition under Project 052 was clearly deficient and about 7% of the budget was expended. Meanwhile, documents are very scarce. Only a fraction of the books authorized under Project 070 have been obtained and are in place.

During the first year of Project 070, problems, some of them serious, arose between the USAID project manager and the Pragma team. This has now been changed by the introduction of a new project manager and modifications in the Pragma team.

E. Sustainability

There are many aspects in the sustainability of a project, its position in the organization, its institutional capacity, retention of personnel, utility of function and budget. The Service has been recognized by the GOZ and its position in the DOA responding to the Secretary General of Agriculture is ideal for the function which is to perform. The new proposal for the institutional establishment of DADRE (November 20, 1982) which has now been installed defines the work of the Service clearly and in a way that conforms to Project 070. With a table of organization authorizing 133 people, the Service has a cadre far superior in number and quality to that of any other Direction in DADRE.

The institutional capacity of the Service is of a high quality (see also Dr. Frazier's report on DAS) and, if it were totally staffed, it would be capable at the end of Project 070 of carrying out its activities except for the fact that the DAS is not gathering any quantity of valid data, which the Service requires to perform its role on a long-term basis with assurance that it is on a demonstrably correct path.

The major weakness of the ten year program to improve the capacity of the Service is the rapid turnover in staff due to trained people leaving to take higher paying jobs, mostly in GOZ service. The average life of a trainee in the Service after finishing his Master's Degree or other training is between one and two years. That is, the number of U.S. trained people under Project 052 left in the Service under current circumstances would be about 14 in 1985 and about 8 in 1986. To reduce this outflow, a system of premiums is being paid. It should be recognized that certain GOZ organizations (the Plan, Institut de Recherches Economiques et Sociales (RES), and others), as well as parastatals, pay higher and thus adequate salary supplements from their operating budgets in order to retain their trained cadre.

The utility of the function of the Service is well established within the GOZ and DADRE. If a flow of valid agricultural statistics could be developed, the Service would be in a remarkable position as the major provider of agricultural statistics, agricultural economic analyses,

identification of constraints to the development of the agriculture sector, and in planning strategies and designing projects to improve conditions for both the producer and the consumer. The future economic development of Zaire will probably be more determined by the performance of the agriculture sector than by that of mining and manufacturing.

Budgetary sustainability is not yet in sight; indeed, given the budget allocations it is hard to sustain the proposition that agriculture is the "priority of priorities." Several GOZ institutions that apparently enjoy a higher priority for budget are sustainable. If the Service establishes itself as the main provider of agricultural statistics analysis, plans and projects, in the vacuum that presently exists, it can be hoped that the GOZ will accord it a status similar to the Commissariat au Plan and university research institutions in respect to the salary level of its staff.

A special element of sustainability in this project is the computer system, including maintenance, repair, and technical assistance on hardware, plus programming assistance (to write adapted programs, on purchases of software programs, e.g., dBase II, Statpak and Visicalc). The first is being covered by Pragma; however, it may be appropriate to make an effort to get the B (second) disk unit working better. The second requires institutional backstopping from the U.S. by people who are or become familiar with the programs used there, and the data processing to be done, and who are available on call by telex or telephone to solve problems immediately. Purdue University provides this backstopping to two projects in West Africa, but using TRS80 Models I and III and Maxistat, which is comparable to the Statpak in use by DAS. The Purdue program is mentioned to give an idea of the type of service that might be appropriate to provide backstopping in problem solving.

F. Project Outputs

The attainment of project outputs has, in the case of Project 052, generally been unsuitable. The revised logframe, resulting from the 1980 evaluation, specifies a list of capabilities. We have no means of establishing whether these capabilities existed at the effective end of Project 052 and the beginning of Project 070. The 1980 evaluation pointed out that the

DAS was more developed in terms of training than the Service. In spite of loss of personnel, DAS has retained a considerable part of its technical skills and has the capability to do a good job if it could overcome the problem of the collection of data. The Service, on the other hand, probably did not meet its required output and neither did the management and administrative system. However, as pointed out earlier, these outputs were largely restricted to capacity and not to physical output.

In terms of Project 070 outputs the progress is listed as follows:

- Seventy individual plans and job descriptions written and utilized; the job description for all the personnel receiving salary supplements has been written and in the Division of Agricultural Strategy and Planning, apart from the fire fighting, the technicians are progressing on their work plans. In the DAS there is less accomplishment of the work plans.

- Four people trained in administration and bookkeeping. This has not yet been started because of the technician selected by the Project Director and USAID; arrangements are being made to rectify the situation.

- Ten people trained in survey sampling procedures; five people remain in the DAS who have been trained in this area and four more attended the recent USDA OICD short course. Attrition of trained personnel is diminishing this output.

- Four people trained in data processing. Three people plus the Bureau Chief were given some training in data processing on the Apple II micro-computer. One has since left. The Bureau Chief himself did not participate actively enough to be able to use the micro-computer and needs further training. Two trained people remain and they have not trained any computer operators.

Formerly, Statistical Analysis Program (SAS) was used on the Ministry of Finance computer; however, this capacity to use SAS

seems to have expired because the DAS no longer has the access code; this could be renewed if required.

- Four people trained to produce quarterly reports; the absence of quarterly reports on the agricultural sector is caused by lack of data rather than lack of personnel.

- Five people trained in project design and analysis. The five have been trained but none of them remains and a new start has been made. Two of the people who received some training were sent to the U.S. In addition, one of a planned series of two short courses has been held by OICD in Zaire.

- Twenty-eight degrees obtained. More than twenty-eight people have returned with degrees under Project 052 and this substantial accomplishment will be further augmented by the 14 who have not yet completed their academic training. However, the rate at which these trained people are being lost from the project will not enable its output goals to be met.

- Quarterly formal meetings held on regional planning. Meetings are held at least twice a month.

- Three agricultural commodity studies completed. This has been accomplished but the quality of the studies is not satisfactory due to a lack of statistical data and lack of depth of analysis. It is hoped that the competence of the Pragma team will be used to correct this.

- Two long-term and five short-term marketing studies will be completed. Marketing is a part of the commodity reports (see output immediately above). However, the reports do not satisfy the purpose of the output to "identify ways of strengthening market mechanisms for the particular benefit of small farmers." The standard answer is transportation and containers (sacks, etc.) but it is not clear whether this really helps the small farmer and no study has been made to find out.

- Two annual reports issued. Lack of statistics prevents this from being fulfilled. However, a substantial agricultural sector report has been published by the Pragma team; given reports of the agricultural campaign, which will not be available on a timely basis, this report could be updated.

- Two policy papers issued based on data collected. The data have not yet been collected.

- One ten-year plan issued. A ten-year plan is probably inappropriate. The Service contributed to the two-year plan and is working on a five-year plan and a series of regional plans. Without another expatriate technician, the nine regional plans may not all be completed.

- One three-year plan issued. This is not appropriate because the GOZ required one two-year and one five-year plan (see output immediately above).

The major obstacle to attainment of the project outputs has been the lack of performance of the DAS. Even in cases where the output requirements are being met, e.g., the next to the last point above, the planning and the quality of work are severely constrained by the lack of a valid base of data.

A second area of weakness is in data processing. Theoretically, with the Apple II system now in place, the DAS should have a good capacity to analyze data. However, from the point of view of hardware, there seems to be an intermittent fault in the B disk unit or in the cables connecting it to the keyboard. The "programmers" also say they need an uninterrupted power supply (UPS) to permit saving data in case of power outage; a UPS for the Apple II and the mini-disk units would be helpful in the case where power outages are frequent. The UPS would not need to support the printer and the hard disk.

The programmers are not adequately trained and if they were, they would need pay premiums to hold them in the DAS. It takes

considerable experience to be able to answer all the questions that arise in the week-to-week operation of a series of newly installed programs, particularly dBase II and Statpak. There is also the need to write small variants on the programs adapted to the local needs. So far, no one completely familiar with these two programs has been available to the DAS in Zaire. It is not clear how far Dr. Frazier will be able to develop this capacity. There seems to be a need for backstopping, but even Mr. Bertoli was not familiar with the two programs involved. Setting up such a backstopping in the U.S. for one project would be expensive, perhaps \$20,000 - \$30,000. We see the need but know of no ready-made solution.

G. Beneficiaries

The direct beneficiaries are those receiving formal and on-the-job training; many of them are now receiving higher salaries outside the Service. DADRE has profited from the enhanced capabilities of the Service and also from the services of some of those trained for the Service who are now working elsewhere in DADRE. A major part of the trainees who have left the Service and DADRE are employed in governmental or parastatal positions -- some 13 all together. The benefits to the GOZ will increase as the returned trainees gain more experience.

If the shortage of valid data in the DAS can be overcome and if an increase in the salary supplements can be applied to reduce the loss of trained people from the Service, the Service will increase its stature as the focus for agricultural sector data, project design and Project Paper evaluation, and planning, to the long-run benefit of the agricultural sector, both producers and consumers. Already the Service has considerable stature in the agricultural sector of Zaire, and with those responsible for its development.

H. External Factors

1. Changes in the Economy

The budget of the GOZ to agriculture has declined greatly

in real terms. The historical rate of inflation is of the order of 100% a year. From 1975 to the end of 1982 the INS index of consumer prices in Kinshasa increased by 3000%. This has a serious effect on the buying power of salaries; for example, the buying power of the staff of the Service has declined by about two-thirds in the last seven years. This greatly decreases the ability of the Service to retain its trained staff.

The GOZ has produced a plan for the recovery of the agricultural sector which aims to: increase the production of food crops, as a means of import substitution; increase the production of crops for the domestic processing industry, also import substitution; and increase the production of export crops, to earn foreign currency. Unfortunately, the data on which the plan is based make the targets somewhat arbitrary and with no means of verifying achievements. There is also little or no data on the validity of most of the technical packages being promoted to achieve the goals of the plan. Budgetary support for accomplishing the goals is weak. The GOZ has relaxed controls on the prices of most agricultural commodities at the national level but many of the regional governors are retaining fixed prices. The effect of freeing the prices at the farm level is difficult to estimate; consumer prices have continued to increase.

At the 1982 meeting of the consultative group on Zairian Agriculture, the need for improved agricultural statistics and the interest in obtaining them was repeatedly stressed by Zairians and by donor representatives.

2. Changes in Organization

DADRE has again been made responsible for Rural Development, Environment, and Tourism. However, rural development, which comprises all of integrated rural development except agriculture, has not yet been integrated with agriculture.

The Service d'Etudes et Planification has been upgraded to a Direction and has had two divisions added, the Division of Agricultural and Animal Science Research and Training and the Division of Strategy and Planning for Rural Development. The number of personnel has more than doubled and

the office facilities have been significantly expanded and improved. The responsibility for project monitoring and evaluation has been transferred, on paper, to the Direction of Project Administration. However, since this Direction has no personnel to do the job, the Bureau of Projects of the Service continues to be asked to do the work. No real system (as proposed by IBRD and FAO) of continuous project monitoring and evaluation is being considered at present.

A Cellule de Conception was established in the office of the Minister; the cellule serves as an internal group for determining DADRE's position on policy matters. The composition of the cellule includes representatives from all directions, services, cabinets, etc., in DADRE. It will be funded on a three-year basis under the IBRD loan (see Annex K). The Minister is also chairman of an interdepartmental committee to resolve problems in agriculture and rural development below the level of the Executive Council. These changes make it possible for DADRE to have more input and a leading role in the development of the sector and in its planning.

3. Change in Planning

There is an increasing tendency to strengthen the capacity of regional administrations to plan. This requires a great degree of collaboration between the Bureau of Planning and the regional offices, imposing an extra load on the personnel of the Bureau. It is not entirely clear that regional planning has been accepted in terms of project selection at the central government's decision-making level.

4. Changes in Other Donor Assistance

Two major changes have occurred. The FAO has not yet replaced its last technician in the DAS; and the IBRD will finance a development credit for an agricultural technical assistance project to strengthen the GOZ capacity to "further elaborate and carry out its agricultural action plan" (Annex L). This project amounts to an assistance to DADRE in planning and preparing development projects, implementation, monitoring and evaluation of projects, financial and budgetary management, key policy issues, and strengthening the management and operation of ONDE (livestock development).

Three technicians are specified for the three-year life of the project: a senior advisor for project planning and preparation, a planning advisor and an implementation advisor for project implementation. Shorter term advisors include a livestock advisor, a financial and budgetary management specialist, and a monitoring and evaluation specialist. In addition, advisors will be made available for studies on key policy issues. About fifty long-term traineeships are also proposed.

Part of the IBRD implementation will take place in the Division of Project Administration and part in the Office of the Commissaire, presumably in the cellule de liaison. There would seem to be a considerable overlap between the IBRD project and Project 070 in the project identification and design area and in the planning and strategy area. However, if an IBRD project technician were placed in the Service, the work of the two projects could be coordinated. There may also be some overlap in training. Recruiting fifty students for study abroad also needs to be coordinated with the Project 070 training program.

V . RECOMMENDATIONS

1. Participant processing and placement:

- a) Those selected have at least one year on the job prior to beginning English language training.
- b) GOZ should be asked to negotiate a contract with selected participants in which they commit themselves to serve in the Service following their return to full-time employment an amount of time equal to that spent in studies abroad.
- c) As soon as they begin English language training, their academic dossiers be sent to a contracting university to determine the admissability of the candidate in terms of desired programs and institutions. Those candidates who do not qualify should not be sent to the U.S.
- d) Candidates should score near 500 on the TOEFL prior to departure so that English language training in the U.S. would take no longer than three months.
- e) At least one content area course should be taken by each candidate during the English language training program in the U.S.
- f) All theses and dissertation research should be done in Zaire. Institutions which do not agree to this requirement should not be permitted to participate in the training projects.
- g) Participants should be monitored more closely in terms of identifying academic problems as quickly as possible and taking remedial action. Failure in academic programs was overwhelmingly correlated with failure to return to Zaire.
- h) Theses and dissertations completed in Zaire are found to be extremely valuable sources of data and information on agriculture and rural development in a country where such information is critically short. At least five copies of each should be available in country.

- i) A supervising professor should return to provide academic guidance to participants doing in-country research under Project 070 as Professor Thompson has done under Project 052.
 - j) Universities offering MS programs to participants should be advised prior to participant enrollment that if it will take over two years to complete the degree, it will be necessary for them to provide the Mission with a detailed description of candidates' academic programs.
 - k) It is urged that the Mission immediately determine if the two Project 052 graduates now continuing their doctoral studies in the US and Canada under the sponsorship of their respective universities would be interested in returning to Zaire to do their dissertation research. If they would, it is recommended that the Mission fund this element of their doctoral programs and make copies of the dissertations available according to the recommendation contained in (h) above.
2. To increase retention in the Service, the Mission is urged to match immediately the premium provided to employees of comparable grades in the Ministry of Plan and to support the effort to place the Service on the same pay scale as university researchers. If this were accomplished, the problem of Service personnel sustainability would be resolved.
3. It is recommended that the Mission consider expanding the training component of Project 070. The Service is prepared to send the bulk of those to be trained under Project 070 to work in the regions under the decentralization of planning effort (at one to each of the eight regions). In addition, it is estimated that the Division of Agricultural and Animal Science Research and Training will require at least eight to be trained in order to bring that unit up to technical skill strength. Without considering what the training needs will be for the fourth division (Strategy and

Planning of Rural Development) because it is not yet adequately defined nor has the decision yet been made by the Mission to include it within the project, the total number of U.S. training scholarships proposed under Project 070 (12) is already exceeded by the known demand. The above considerations do not, moreover, include normal attrition assuming the excessive attrition now occurring is stopped.

4. In-country training should be increasingly emphasized, but it should directly relate to on-the-job applied areas of instruction. Pragma team members and Division and Bureau heads should be polled at least quarterly to identify specific training needs.
5. Participants trained under this project are now placed in a spectrum of positions in key planning units within the governmental structure. This forms the basis for a potentially significant informal network which if promoted could facilitate coordination and cooperation across bureaucratic boundaries often difficult to traverse officially. It recommended that CENACOF be contracted to promote and encourage networking among former participants.
6. Books available under Project 052 should be purchased as soon as possible and retained in the central office of the DASP. The World Abstract of Agricultural Economics and Rural Sociology should be used as a reference for selection of books to be ordered.
7. It is recommended that the Pragma team continue to place a major emphasis on on-the-job training within the Service including office management and coordination technique. The rhythm and integration of the various divisions must be established to meet the short- and long-term missions of the Service with maximum effectiveness and performance. No functioning model has existed so that the entire operation must be created.

8. As trainees from Project 070 begin to return for their thesis research, it is recommended that if a regionalization program is being implemented and it is apparent that the Project 070 participants will be assigned to the regions, then the Mission consider adding an additional project technician to work on regionalization.
9. Because the Service has no valid system of data gathering in sight, USAID (Kinshasa) should fund a short TDY to advise on the alternatives available within the U.S. government to remedy this situation. This is expected to require a new project.
10. We recommend that USAID take the leadership in the systematic gathering of agricultural data in collaboration with the FAO, and the Belgian and other bilateral missions. We foresee that this will involve mounting an agricultural sample census.
11. We recommend that any measures short of the systematic gathering of data gradually for all the agricultural regions of the country will result in plans, projects, and sector studies built on an invalid and inadequate data base. This will haunt the future of Zairian agricultural development and result in failure to meet the project goals and purposes of the series of three projects over 12 years. All that will remain is a training effort with results built on the same "expert judgment" as before and quantitative planning and analysis will not be operationalized (cited from 052 PP).
12. It is recommended that Director Mubenga be advised to select as soon as possible a temporary assistant to act during the assignment of Cit. Singa as the advisor to the Secretary of State for Agriculture.
13. Miss Lorraine Thompson should be directly responsible to the Pragma team leader. This does not stop her from doing jobs for the Director. This will avoid any splitting of the project staff when the person to help in developing the office management system is on site.
14. The Pragma team should be permitted to employ a third country national to develop the office management procedures in place of an expatriate or expatriate on TDY.

15. The USAID Controller (Kinshasa) should examine the accounts of Projects 052 and 070 and make recommendations on changes necessary to conform to USAID requirements. It is recommended that the Direction's accounts under Project 052 be audited. Project 070 accounts should be included in the audit if the Controller so recommends.
16. We recommend that some system of backstopping technical training and maintenance in the use of the programs (particularly CP/M versions of dBase II (Ashtontate) and Statpak) be provided. This should include development of experience in using the programs and procedures in the DAS, providing training courses for "programmers" and operations in Zaire in French and being "on call" as required by telex or telephone to answer technical problems and, after the end of the Pragma contract, service problems.
17. We recommend that USAID amend Project 070 and the Pragma Contract to include provision of a technician to the Division of Agriculture and Animal Science Research and Training to assist in the development of the division, including the documentation center.

A N N E X E S

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A limited number of copies of the extensive annexes to this report have been made. Copies will be available for reference in AID/Washington at AFR/CA and AFR/PD/CCWAP (as well as at the USAID Mission).