

PROJECT EVALUATION SUMMARY (PES) - PART I

Report Symbol U-447

1. PROJECT TITLE AGRICULTURAL PRODUCTION PROGRAM - GRANT			2. PROJECT NUMBER 150-0023	3. MISSION/AID/W OFFICE USAID/Lisbon
5. KEY PROJECT IMPLEMENTATION DATES			4. EVALUATION NUMBER (Enter the number maintained by the reporting unit e.g., Country or AID/W Administrative Code, Fiscal Year, Serial No. beginning with No. 1 each FY) <u>85-1</u>	
A. First PRO-AG or Equivalent FY <u>80</u>	B. Final Obligation Expected FY <u>85</u>	C. Final Input Delivery FY <u>85</u>	6. ESTIMATED PROJECT FUNDING A. Total \$ <u>14,500,000</u> B. U.S. \$ <u>10,000,000</u>	
			7. PERIOD COVERED BY EVALUATION From (month/yr.) <u>4/83</u> To (month/yr.) <u>11/84</u> Date of Evaluation Review <u>Nov. 1-16, 1984</u>	

8. ACTION DECISIONS APPROVED BY MISSION OR AID/W OFFICE DIRECTOR

A. List decisions and/or unresolved issues; cite those items needing further study. (NOTE: Mission decisions which anticipate AID/W or regional office action should specify type of document, e.g., airgram, SPAR, PIC, which will present detailed request.)	B. NAME OF OFFICER RESPONSIBLE FOR ACTION	C. DATE ACTION TO BE COMPLETED
1. Extend PACD by 2 1/4 years, from 9/30/85 to 12/31/87.	USAID, AID/W	5/85
2. Continue the process of narrowing project scope and integration of activities so there is a more clear and direct focus on increased agricultural production at the farm level.	OICD/L, CG	2/85
3. Continue to plan and implement all project activities in close collaboration with the coordinating group (CG).	OICD/L, CG	2/85
4. Project leadership (GC and OICD/L) to work more directly and closely with the Regional Agricultural Directorates (RAD).	OICD/L, CG	2/85
5. Make every effort to insure that a four person agricultural production team (crops, soils, animal science and farm management/credit) is trained to the M.S. level in each of the 7 RAD.	USAID, OICD/L, CG	2/85
6. Given increased farm level production focus and PACD extension, revise project T.A. work plan, training plan and associated budgets.	OICD/L, CG	4/85
.. (Cont. Page 2)		

9. INVENTORY OF DOCUMENTS TO BE REVISED PER ABOVE DECISIONS	10. ALTERNATIVE DECISIONS ON FUTURE OF PROJECT
<input type="checkbox"/> Project Paper <input checked="" type="checkbox"/> Financial Plan <input type="checkbox"/> Logical Framework <input type="checkbox"/> Project Agreement <input checked="" type="checkbox"/> Implementation Plan e.g., CPI Network <input checked="" type="checkbox"/> PIO/T <input type="checkbox"/> PIO/C <input type="checkbox"/> PIO/P <input checked="" type="checkbox"/> Other (Specify) PASA <input checked="" type="checkbox"/> Other (Specify) PACD	A. <input type="checkbox"/> Continue Project Without Change B. <input type="checkbox"/> Change Project Design and/or <input checked="" type="checkbox"/> Change Implementation Plan C. <input type="checkbox"/> Discontinue Project

11. PROJECT OFFICER AND HOST COUNTRY OR OTHER RANKING PARTICIPANTS AS APPROPRIATE (Names and Titles) Dr. Darrell Finéup, Michigan State University; Dr. Jerome Maner, IADS; Dr. Roger Hanson, University of Missouri; Dr. Gaylord Obern, University of Pittsburg; Dr. George Miller, AID/NE Bureau; and Eng. Francisco Cary, IFADAP	12. Mission/AID/W Office Director Approval Signature: <i>Michael F. Lukowski</i> Typed Name: Michael F. Lukowski Date: February 21, 1985
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|--|---------------------------------|-------------|
| <p>7. Review OICD/L and OICD/W staff requirements and job descriptions. OICD/L staff descriptions should be modified to provide (a) 25-50% time devoted to professional activities in their respective areas of technical expertise and (b) 25-50% time to be spent with RAD outside Lisbon.</p> | <p>USAID,
OICD/L, AID/W</p> | <p>4/85</p> |
| <p>8. Appointment of a full time OICD Production/Extension/Agronomist to be stationed in the north to work directly with the northern RAD to improve and coordinate production related activities. (If full time appointment not feasible, a U.S. University should be contracted to provide short-term consultant services on a regular basis).</p> | <p>OICD/L, CG
OICD/W</p> | <p>5/85</p> |
| <p>9. USAID to work even more actively with Ministers of Agriculture and Finance to insure high level political support for project.</p> | <p>USAID</p> | <p>2/85</p> |
| <p>10. Continue to strive for improvement of Portuguese Government budget and administration support. Rapid approval and availability of PIDDAC and use of PL 480 budgeting funds.</p> | <p>USAID, CG</p> | <p>2/85</p> |
| <p>11. Strive to continue to improve understanding and support for program by regional directors and central services of MAFA.</p> | <p>OICD/L, CG</p> | <p>2/85</p> |

All team members had strong discipline competencies and reputations plus direct experience in comprehensive agricultural development projects.

The team represented different U.S. entities involved in agricultural development, e.g., AID, USDA/OICD, non-profit agricultural developmental entities and Land Grant universities. This diversity of entity representation on the team expanded the team's experience base and maximized consideration of future project approaches and strategies.

Methodology

The evaluation team worked with Portuguese counterparts in conducting the evaluation. Counterparts represent entities independent of PROCALFER. The methodology followed by the evaluation team and counterparts included the following: data review, briefings, interviews and field document review visitations.

Project Objectives, Goals and Purposes

The Project has made substantial progress toward achieving its objectives during the first four years of operation. Project objectives, goals and purposes as originally conceived, remain valid. The objectives of increased agricultural production/productivity and institutional development are complementary and consistent.

The project's feed/forage/livestock sector focus addresses priority national agricultural problems and those commodities with greatest comparative advantage in the EC. Project geographic emphasis in the North, where small farms predominate and where some of the greatest farm adjustments will be needed with EC accession, also addresses national priorities. The project's work in strengthening the role of private sector cooperatives and cooperative unions has been highly successful in bringing new agricultural technology to farmers.

Recommendations

1. The evaluation recommends no changes in original project objectives, goals or purposes.
2. It is recommended that the PACD be extended for 2 1/2 years to compensate for project implementation delays encountered during the first two years.

Near East Evaluation Abstract

Agriculture Production Program
(150-0023) (Grant)

USAID/Lisbon

Project Description

The Project directly assists the Ministry of Agriculture and Fisheries (MAP) in developing and implementing a comprehensive program of agricultural improvement, particularly its program of soil correction, fertilization and increased forage production, with the purpose of further strengthening and supporting the Portuguese institutions responsible for carrying out these programs.

Evaluation Background

The third Joint Review and Evaluation of the Agricultural Production Program was completed November 16, 1984. This evaluation included the entire period of project life to date, but focused on the period since the last evaluation, which was completed April 15, 1983.

The central concern of the evaluation was to provide productive input into future project planning and implementation activities to achieve project objectives. In addition to enhanced insight into these concerns, the results of the evaluation are to provide input into the decision process regarding a project extension through 1987 requested by the Minister of Agriculture.

Drawing from the original Project Logical Framework, the evaluation addressed five central issues:

- Project Objectives, Goals and Purpose
- Project Outputs
- Project Inputs
- Project Institutional Setting
- Project Management

Team Composition

The evaluation team consists of five discipline professionals: a) an Agronomist, b) an Animal Scientist with production and management expertise, c) an Agricultural Economist, d) a Public Administration Specialist, with emphasis on project management and budgeting and e) A General Agriculturist. The Agricultural Economist served as Team leader.

Lessons Learned

1. Projects can achieve significant progress even when confronted with exceedingly difficult institutional problems.
2. Project Managers must be selected with extreme care. Project managers must have the proper mix of training, experience, and technical, managerial and interpersonal relationship skills to effectively manage AID projects.

13. SUMMARY

Evaluation Background

The third Joint Review and Evaluation of the Agricultural Production Program required under AID Grant Agreement (Project Number 150-0023) and under the PASA (Number POR-0023-P-AG-1028-00) between AID and the USDA was completed November 16, 1984. This evaluation included the entire period of project life to date, but focused on the period since the last evaluation completed April 15, 1983.

As noted in the Evaluation Scope of Work (Appendix A), the central concern of the evaluation was to provide productive input into future project planning and implementation activities to achieve project objectives. In addition to enhanced insight into these concerns, the results of the evaluation are to provide input into the decision process regarding a project extension through 1987 requested by the Minister of Agriculture.

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The project's feed/forage/livestock sector focus addresses priority national agricultural problems and those commodities with greatest comparative advantage in the EC. Project geographic emphasis in the North where small farms predominate and where some of the greatest farm adjustments will be needed with EC accession also addresses national priorities. The project's work in strengthening the role of private sector cooperatives and cooperative unions has been highly successful in bringing new agricultural technology to farmers.

The evaluation recommends no changes in original project objectives, goals or purposes.

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Project Outputs

The Project has matured notably since the last evaluation April 1983. Specific areas of significant progress are:

Limestone Program. A limestone production, transportation, delivery and distribution system is in place. Farm use of limestone has increased by 700 percent since Project initiation.

Soil Analysis. A modern and functional soils testing system is in place. Soil samples tested have doubled between 1980 and 1984.

Extension. An extensive system of extension demonstration plots has been established on farmer fields demonstrating the impacts of Project-derived technology.

Credit. Two Project credit lines have been successful in stimulating limestone production and storage facilities.

Management. A Project financial and budgeting management system has been installed and is functioning in the regions.

Animal Production. A National Sheep and Goat Program is being developed and now shows significant potential to produce new production technology.

Economic Studies. Output from this activity has contributed significantly to improved national policy making especially related to EC accession issues.

Training. A training plan has been developed and implemented and significant in-country training has taken place.

Areas showing less progress since the last evaluation include:

Forage Production. Relative to other Project components, the forage and pasture program is lagging. While there has been some progress in conceptualizing program needs, implementation lags.

Farm Systems Analysis. Work to date has not been integrated into Project agronomic and livestock activities.

Long-Term Training. Little long-term technical training is underway. This has been a problem area since Project initiation.

Research. The Project has not been successful in moving national agricultural research work from the laboratories to the field or notably involving researchers in applied research.

Activity Integration. Individual Project activities remain relatively isolated from each other with little integration.

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Project Inputs

Some 177 person months of consultant services have been provided since project initiation. There is evidence that great effort has been made to procure very qualified individuals. The most effective consultancies had Portuguese counterparts and continued with follow-up work over a period of years. With the exception of the PES work, the most successful consulting activities had full support of the Project Coordinating Group.

Commodity inputs, provided on a timely basis, have been important in furthering Project accomplishments. These inputs have especially important in the soil analysis, extension, PIMS, and animal production components. The provision of micro-computers for soil analysis work, for example, has been responsible for the initiation of a nation-wide soils mapping effort.

Project Institutional Setting

The Project's very difficult, uncertain and complex institutional environment continues. As stated in the evaluation, "The complexities of all the organizational units, individuals and their relationships within the project...defy easy or quick description or analysis".

Since project initiation, six different Ministers of Agriculture and numerous (Agricultural) Secretaries of State have passed through the Ministry of Agriculture. Very frequently, these positions have been in a state of transition, if not limbo. Until mid to late 1984, the Regional Services and the Planning Cabinet, both critical to Project implementation, had no organic law. Key director positions have been unoccupied or filled by acting directors. Government budgets have been slashed and delayed for months. A government-wide hiring freeze has crippled agencies hit by retirements and resignations. Many Ministry of Agriculture contractors have gone without salaries for up to a year.

Given these exceedingly difficult institutional problems, it is commendable that the Project has made very significant progress in so many areas. In spite of these difficulties, the prospects for achieving Project goals are excellent.

Project Management

Since the previous evaluation, the team leader has been replaced and a training officer has been added to the resident OICD staff. Due in large part to the efforts of the new team leader, U.S. and Portuguese staff are now working together as a team and collaborating fully on all aspects of Project planning and implementation. The result has been increased efficiency and effectiveness.

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PROBLEM ISSUES

Project problem areas can be classified in two major categories: 1) implementation problems and 2) institutional environment problems. To a great extent, but not entirely, implementation problems are a result of institutional problems. The evaluation addressed both problem areas. But the focus was primarily on implementation problems because essentially all institutional problems are beyond Project control. Some of the major institutional difficulties were referred to above. Brief comments on important implementation problem areas follow.

U.S. short term and long term technical training is below target levels. In country training, while improving since the last evaluation, also lags behind original expectations. Although a training plan for 1984 and 1985 was approved by the Minister of Agriculture, it has not been fully implemented to date. It is anticipated that the recent addition of a resident OICD training officer will help in moving all training efforts along at a more rapid rate.

Forage and pasture production work, while proceeding, has moved slowly. It is recognized that Portugal's "forage problem" is immensely complex and will not be quickly or easily resolved. More work is required at the regional level.

Component activities of the Project are not yet well integrated. Although some excellent work is being accomplished in individual Project components, these activities are fragmented and not well integrated into an overall program. This fragmentation is to a great extent a manifestation of the institutional problem and will not be easily overcome.

14. PROJECT BACKGROUND

Post-revolution Portugal (after 1974) has suffered from serious economic problems including declining productivity, reduced domestic savings and negative investment in most of its economic sectors. The result has been high inflation, large public deficits and, until recent months, growing import/export imbalances which have led to adverse balance of payments problems and continual currency devaluations.

One of the major contributors to the nation's economic difficulties is the agricultural sector. Despite generally favorable climatic conditions and a reasonably good natural resource base, agricultural output has stagnated, even deteriorated, over the past two decades. Imports of food and other agricultural products have grown more rapidly than agriculturally-based exports. Growing disparities between rural and urban income levels have contributed to a major exodus from rural areas.

Since the revolution, the situation has worsened. Aggregate demand for food has increased with the inflow of over 700,000 refugees from former African colonies. Combined with modest rises in income, this has resulted in sharply increased demands for animal proteins, and in turn a growing need for imported feed grains and oilseeds. Today, agricultural imports

account for over 20% of all imports and are the single largest import category.

Portugal is expected to enter the EC in 1986. It's internal market will be opened to European competition. As a condition for membership, internal subsidies to producers and consumers will have to be gradually abolished. Over time, agricultural prices must equalize to EC levels. For a few commodities, there will be a price incentive to domestic production. For most, however, the incentive will be negative. Overall, the impact of EC accession on Portugal's agriculture is expected to be painful. Moreover, because major agricultural imports (grain and oilseeds), will be acquired at higher EC price levels, the agricultural balance of trade will worsen. The impact will be to put even greater pressure on the nation's already difficult foreign exchange position.

The central agricultural problems to be addressed are twofold--increased output and increased resource productivity. A sustained output increase will reduce agricultural imports and thereby foreign exchange expenditures. Increased resource productivity will permit Portugal's agriculture to compete more effectively with that of the EC.

Constraints to increased agricultural production and productivity are structural, institutional, political and technological. No list of specific factors would be complete, but would certainly include the large number of small, highly fragmented farms of Northern Portugal; the difficult agrarian reform problems in the Alentejo; a perverse and complex system of price controls and subsidies; unresponsive agricultural research and extension systems; a cumbersome, highly decentralized agricultural bureaucracy; an inadequate agricultural credit system; an antiquated marketing system and a generally, but not universally obsolete agricultural technology.

The problems of agriculture appear to be recognized by the government and this project is a manifestation of these concerns. At the request of the Minister of Agriculture in 1979, AID provided a consulting team to conduct an assessment of the agricultural sector, identify key problems and make recommendations for corrective action. After the team's presentation of findings to the GOP in December 1979, a group was appointed within the Ministry of Agriculture to develop a comprehensive program to increase agricultural productivity and output.

A preliminary program was completed at the central planning level and approved by the GOP in April 1980. It was subsequently issued to MAFA Regional Services for each to develop programs reflecting local problems and needs. Further meetings of central and regional officials refined the program.

The Project Identification Document (PID) was completed in March 1980 and approved in Washington May 1980. The Project Paper was then written and approved in August of the same year and the Grant Agreement between Portugal and the United States was signed September 16, 1980.

The project management was arranged via a PASA with USDA/OICD. The first OICD resident person, the Administrative Coordinator, arrived February 1981. The Team Leader arrived later that year and led the Project until September 1983. A new Team Leader assumed Project leadership June 1984. An OICD Training Officer was added to the resident team in mid 1984.

15. EVALUATION METHODOLOGY

The central concern of the evaluation was to provide productive input into future project planning and implementation activities to achieve project objectives. The evaluation determined progress toward attainment of project objectives, and specifically, attempted to: a) provide a sound and impartial basis for continuing or modifying current and future project activities, approaches and strategies, b) enhance insight into factors contributing to or constraining project achievements, c) identify important lessons learned to date that could be applied to future actions, and d) identify "lost opportunities", i.e., unexplored or unutilized means and approaches in achieving project objectives.

It is anticipated that the evaluation will provide substantive input into the decision process regarding a project extension through CY 1987 requested by the Minister of Agriculture.

The external evaluation team consisted of five discipline professionals: a) an Agronomist, b) an Animal Scientist with production and management expertise, c) an Agricultural Economist, d) a Public Administration specialist with emphasis in project management and budgeting and a Portuguese counterpart agricultural credit specialist. The Agricultural Economist served as Team leader. Mr. George Miller, Project Backstop Officer AID/Washington also participated fully in the evaluation.

All team members had strong discipline competencies and reputations plus direct experience in comprehensive agricultural development projects. All external evaluation team members had Portuguese language capability and a translator was provided for Mr. Miller.

The team represented different U.S. entities involved in agricultural development: AID, a non-profit agricultural developmental entity (IADS), a Grant and a public U.S. university. The Portuguese team member was dependent of the Project. A diversity of entity representation on the team expanded the team's experience base and maximized consideration of future project approaches and strategies.

The methodology followed by the evaluation team included the following:

1) Team Orientation Meetings. An orientation period of two days was held in Washington for the evaluation team prior to departure for Portugal. The orientation included meetings and briefings with individuals involved in project management and implementation plus a review of documents including the Project Paper, Grant Agreement, previous evaluations, Consultant Reports and other project documents. The orientation included team planning meetings to establish member roles and responsibilities in the evaluation exercise.

2) Document review. Documents reviewed in country included PROCALFER annual reports to the Minister of Agriculture, OICD and AID project reports, consultant reports, PROCALFER management reports and documentation on project component activities (empirical data on limestone distribution, demonstration plots, extension field days, research results, soil analyses, credit disbursed, training and etc.), summary documents prepared specifically for the evaluation and other documentation as requested.

3) Briefings. Prepared briefings on the overall project and all major components of the project were presented to the evaluation team and counterparts. These briefings provided a description of the evolution of activities, progress toward meeting project objectives, empirical data presentations, perceived constraints and recognized strengths. These briefings were presented by the individuals responsible for the project component early in the evaluation schedule.

4) Interviews. Interviews were held with key public and private sector individuals in the capital and five regions. Entities and individuals represented included cooperatives, Regional MAFA Directors and staffs, regional PROCALFER coordinators, Directors of Regional MAFA Services (extension, training, etc.), extension workers, IFADAP, Directors of Central MAFA Services (research, extension, training, etc.), a university president and faculty members. Interviews with representative farmers in the regions were also held. A listing of interviews held by the team is found in Appendix A.

5) Data Review. Project baseline and measurement data was presented in the prepared briefings and background documentation. In addition, computerized data not presented in briefings and background documents were utilized by the team.

16. EXTERNAL FACTORS

The Project operates within a very difficult institutional setting which has not changed notably over Project life. PROCALFER is the national project effort designed to coordinate a host of public and private activities to increase agricultural production and productivity. The complex institutional environment impacts on both public and private sector Project work.

PROCALFER's host government entity, the Ministry of Agriculture (MAFA), is highly decentralized. Seven different regional MAFA offices operate autonomously, their Directors reporting directly to the Minister. While there are Central Services (such as Extension), the Director of a Central Service has no jurisdiction over Regional Service Extension personnel. All communication must be through the Minister to the Regional Director and vice versa. But there are also Central Services that are centralized with field personnel completely unattached to a Regional Service. The communication is thus through the Director of the Central Service to field personnel who have no responsibility to Regional Services.

Institutional structure need not necessarily impede project activities if strong leadership prevails at the Minister level. Unfortunately, six different Ministers of Agriculture and numerous Agricultural Secretaries of State have passed through the MAFA since project initiation. Often, these positions have been in a state of transition, if not limbo. With every leadership change, Directors of both Central and Regional Services often change. This situation has shown no trend for the better until very recently.

While the Project leadership has learned to live with transitory leadership in the MAFA, the Government's difficult budgetary situation has impeded activities. The problems are manifested in hiring freezes and delays in receiving annual budgetary funds. Those MAFA entities hard hit by retirements or resignations cannot fill vacant positions. Funding delays slow field work.

The only consolation is that the MAFA has not been singled out for this unfortunate treatment—all Ministries of the Government are under the same IMF imposed budgetary restraints. But while this situation imposes real difficulties for Project activities, the Project enjoys a very favorable position within the government: it has flexible P.L. 480 funds at its disposal. This funding flexibility has permitted activity continuity not possible in most government operations. If P.L. 480 funds had not been available, the Project would have not been widely successful in achieving many of its goals and objectives.

Clearly, the difficult institutional setting has not contributed positively to Project work. However, Project leadership has been highly innovative in dealing with institutional constraints. Moreover, given the budget flexibility of P.L. 480 funds, it has been able to be somewhat isolated from many of the budgetary problems facing the rest of the government agencies.

The future remains clouded, but perhaps more optimistic than at any time in the last four years. A new Minister of Agriculture and new Secretary of States have recently been appointed. The new Minister is a very highly respected administrator. He has taken a real and active interest in the Project and has met and discussed concerns with the OICD Team Leader, the AID Affairs Officer and the Ambassador. Project leadership is now able to take advantage of the new leadership situation and consolidate institutional opportunities that had not previously been possible.

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17. KEY PROJECT ASSUMPTIONS

The important assumptions identified in the Logistical Framework remain valid. A summary discussion follows.

Goal Level Assumptions

Farmers Participate Fully. Farmers are enthusiastically adopting Project derived technology when it is appropriate to their needs. The widespread belief that most farmers were either too old or too traditional to adopt new technologies is a myth.

Ministry Supports Project. While internal institutional difficulties constrain equal participation across all MAFA entities, Project leadership has been commendably successful in developing MAFA support for the Project. Particularly notable has been the support from three of the four Regional Services in which the Project concentrates, a regional university (Vila Real), the General Livestock Directorate, the national and regional soils

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laboratories and IFADAP (credit). Less support and thus limited participation in Project work has come from the Planning Cabinet, the National Agricultural Research Institute (INIA) and the General Directorate of Agriculture (extension, training).

Economic Structure Changes. A complete discussion of this assumption would be very lengthy. Certainly, no spectacular structural changes have occurred in the Portuguese economy during the past four years. However, many, many marginal changes have taken place that overall represent a positive trend. Many of the post-revolutionary excesses have been corrected. Too, policy makers are highly cognizant of the necessary structural changes required for EC accession. These are now in the public dialogue: they were not four years ago. The trend is positive and productive for the Project.

Policy Constraints Reduced. As with economic structural changes, policy constraints are being gradually reduced and many eliminated. To a great degree, these policy changes are a result of IMF restraints and concern with EC accession. The trend is positive and in the right direction.

Agricultural Investment Increases. Official data indicate no positive change in agricultural private investment. Studies conducted through the Policy and Economic Studies (PES) component of the Project have, however, shown that official data are either erroneous or the data collection system is not picking up the change. PES work indicates that very significant private investment is taking place in Portuguese agriculture. This is further verified by a sharp increase in real credit levels extended to agriculture over the past five years and by the rapid farmer adoption of Project-derived new technology.

Positive Agricultural Policies. The PES work noted above provides a clear indication that agricultural policy changes have been rapid and positive for producers. The rate of change has accelerated. Every indication shows that perverse agricultural policy is not now the primary constraint to increased production. Rather, it is a lack of economic acquisition power (demand) on the part of consumers. This is a result of the sustained recession in the general economy.

Purpose Level Assumptions

Farmers Interested In Increasing Productivity. See above discussion on farmer participation.

Regional Offices Adequately Staffed. Staffing of the Regional Offices has improved both quantitatively and qualitatively since Project initiation. Project P.L. 480 funding has been in large part responsible for this improvement. However, staff upgrading in technical agriculture is required.

Output Level Assumptions

Farmers Receptive to Program. See above discussion on farmer participation.

Research Personnel Receptive to Applied Field Research. Receptivity to an

applied Farming Systems concept of research on the part of INIA researchers has remained unchanged. It is highly negative.

Limestone Produced on Schedule. Limestone production has exceeded original expectations. Production capacity is more than twice current national demand.

Credit Programs are Utilized. Credit for limestone production and storage facilities has been heavily utilized. Credit for limestone purchase and farm investment has not been fully utilized.

Input Level Assumptions

MAFA Absorbs Technical Assistance. Technical Assistance has been readily absorbed by the MAFA when counterparts have participated fully in the effort. Technical Assistance has not been absorbed when this has not occurred.

MAFA Decentralization Proceeds. The decentralization process continues. Only in mid-1984 did the Regional Services have an organic law established. Additional time will be required to institute this new organizational w.

IMPORTANT NOTE: Unstated Assumptions

The logframe made no assumptions regarding the role of the private sector in Project implementation. This can now be noted as an important, even critical omission.

A central component of the Project is limestone production, transportation and distribution. This has been completely successful. It has been carried out entirely by the private sector with the only assistance coming from some public sector credit. Had the private sector not fully participated in this key project component, the entire project could have been jeopardized.

18. INPUTS

Excepting training inputs discussed above, the evaluation noted no problems relating to inputs of commodities and technical services in terms of quality, quantity or timeliness. The evaluation made no recommendations regarding inputs except for minor commodity items to improve soil laboratory analysis and training inputs referred to above.

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19. COMPUTS

Project activities have been implemented under twelve sub-project components. Very significant results have been obtained in seven component activities. Less progress has been made in five of the components. A summary by component activity with recommendations follows:

Limestone Production, Transportation and Distribution. A self-sustaining limestone production, transportation, delivery and distribution system is in place. This includes not only the physical system but also the supporting institutional, financial and marketing system. Limestone is available at reasonable prices to virtually every farmer in the country. Installed national agricultural limestone production capacity now exceeds 300,000 tons per year. Competition for sales by the numerous crushing plants has driven real prices down sharply over the last three years. Consumption has increased 700 percent between 1980 and 1984, from some 15,000 to 120,000 tons.

Static cost/benefit analysis shows private internal rates of returns of over 60% to limestone in the first year of use. Residual effects over following years will multiply this figure several fold. A Project trained analyst in transportation and distribution works closely with plants, cooperatives, cooperative unions and transportation firms, replacing the previous services of external consultants.

Limestone continues to be purchased in bags by small farmers and applied by hand. Bulk distribution is being promoted by the Project and will be implemented on a pilot basis in the 1984/1985 application season. With bulk distribution systems in place there are opportunities for introducing small tractor-drawn spreaders for some farmers. The consulting services of an Agricultural Engineer are recommended to explore the feasibility of developing such units for local manufacture.

This component activity has more than achieved anticipated end-of-project status in terms of installed limestone production capacity. Actual consumption is below goal levels, but the goals were based on physical need, not taking into consideration economic demand.

Soil Analysis. A modern, efficient and functional soils testing system is in place. Project installed equipment doubled soil testing capacity in Portugal between 1980 and 1984. The number of soil samples tested has more than doubled in the same period. Average turn-around time from receipt of samples to mailing of results has halved. Additional equipment being installed and on order will further increase capacity and improve turn-around time. Improved analytical techniques and thus improved test interpretations have resulted in better fertilization and liming recommendations for farmers. Farmers and extension agents report improved recommendations have reduced redundant fertilizer applications.

The widespread availability of soil tests for farmers has had a very significant positive impact on farmer adoption of new soil correction/fertility technology. Farmers now have a scientific, rather than empirical basis for using lime and fertilizer. Moreover, extension agents have enhanced credibility with farmers because they now have a scientific basis

or soil correction/fertility recommendations.

There are opportunities for further improving and expanding the soil testing system. Soil samples are now generally collected by extension agents. As the program expands, farmers will need to be trained to collect their own samples. The need for new analytical techniques to improve interpretation is evolving and will require attention in the future. New computer interpretation equipment being or to be installed will open previously unavailable opportunities for detailed national soils maps.

Anticipated end-of-project status has been fulfilled in this Project component.

-Extension. The Project has established an extensive system of demonstration plots with over 1,000 different plots. Located on farmer's fields, these plots demonstrate the impact of lime and fertilizers on cereals and forages. They are maintained by Regional Services extension agents. Prior to Project establishment of such plots, farmers had no access to empirical demonstrations of varying lime and fertilizer applications. The impact of these demonstrations has been highly positive and significant: correction of soil acidity and fertilizer use have become commonly accepted farmer practices and a revitalization and reorientation of regional extension services has been stimulated by Project efforts.

Given the extension agents' lack of professional training and previous experience in maintaining demonstration plots, plus resource limitations, the plots are not always conducted in the most productive manner. A large number of agents have been trained by the Project. But additional training in subject matter areas requires attention. The incorporation of a resident Production/Extension Agronomist on the OICD team is one recommended means of addressing this need.

This project component has exceeded end-of-project status by a factor of ten relative to the number of demonstration fields anticipated in the original project documentation. Extension agent training is estimated at 50 percent Project goal.

-Forage Production. Relative to other production oriented Project activities, this important component is lagging. While the use of corn hybrids for forage and silage has been a successful effort of the extension demonstration programs, much more emphasis must be given to grass and legume forages.

Portugal's "forage problem" is immensely complex and will not be easily or quickly resolved. Resolution involves the identification of appropriate cultivars for dozens of microclimates; seed production, multiplication and processing; management of pastures including planting, fertilization, liming, rotation, animal nutritional needs and stocking rates; and a host of related concerns. Applied forage research linked to soil improvement and animal production is essential.

This suggests a team approach is necessary to address the multitude of interrelated aspects. The technical inputs of a U.S. institution should be sought to bring together the forage production, animal production and farm practices capabilities required to address regional and national forage

research-extension programs.

The original Project documents did not specify a quantifiable goal relative to this project component. While there has been progress in developing a forage production program, implementation problems were underestimated in original planning.

---Agricultural Credit. The conclusion of the evaluation team is that the agricultural credit component has had mixed success. P.L. 480 sourced credit lines for limestone production and cooperative storage facilities have been highly successful. These two credit lines have been responsible for stimulating significant increases in limestone production and assisting cooperatives build thousands of meters of new storage facilities.

The evaluation team termed the other two lines of credit a "total disaster" in that few loans have been made for limestone purchases and farm investment. However, those made for farm investment (forages) were individually large and will have significant impact.

PROCALFER leadership and the USAID reject the conclusion that the latter two credit lines are a "total disaster". Compared to similar credit programs in Portugal, Project credit has been the most successful given intended objectives.

The original project documentation specified no quantifiable goals relative to credit.

---Project Implementation and Management Systems (PIMS). Despite the complexity and difficulties of the formal Ministry organization and internal relationships, the financial management system and its products have been a successful Project activity. The system has been installed and integrated into the Project's regional support activities. Highly motivated people have been trained in the use of the system for Project and other Ministry activities. The system is being utilized for decision making by Project leadership and high level government officials.

The management system is critical to increasing agricultural output. With increased use even greater confidence in the PIMS will be generated. Expanded use of the system will depend on factors external to the Project. Until these organizational problems are resolved, the larger goal of government-wide financial management/decision-making improvement is not likely to be achieved.

Future options include a mixture of formal and informal actions to achieve system implementation beyond the Project level. These actions should be considered on a case-by-case basis given organizational and institutional differences and goals.

Original project documentation made no specific reference to this component and thus no end-of-project status was defined.

---Animal Production. The animal production program, focusing on small ruminants, has been very successful. Although not initiated until mid 1981 with the first field implementation activity in 1983, the program has been

--Farm Practices/Systems. As a distinct project activity, this component has had no influence in the development of PROCALFER programs. Two consulting activities have been carried out, but generated little interest or action. Both were undertaken in isolation without national counterparts or collaboration.

Farm level analyses have been conducted as a part of the Policy and Economic Studies component (see above). However, the primary focus of this work has been to provide micro data for the macro policy analyses.

This activity has not fulfilled original expectations.

--Agricultural Research. Research is carried out under several project components. Thus this component, as a distinct and separate activity, has had no identifiable objectives or outputs.

As research needs identification and prioritization exercise is required for each region and specific projects prepared and funded. Identification of training needs must be a part of this exercise for the purpose of developing graduate degree or short term programs.

A high level of technical input will be required to foment and support these activities. A resident research coordinator is recommended. If this is not viable, a long term arrangement with an institution capable of providing an array of qualified short term consultants is recommended to accomplish the task.

--Training Design and Administration. Over 1455 person months of training has taken place since project initiation. Yet, on a relative basis, training has moved slowly throughout the life of the project. Recently, project training priorities have been established and an annual training plan developed. In addition, a resident U.S. training specialist has been added to the OICD team and 30% of an OICD/Washington training specialist's time has been assigned to the project. Although these are moves in the right direction, there are still shortcomings in this Project component.

Future efforts must place top priority on training subject matter specialists and not on training of trainers. Training of a minimum of four persons per region to the M.S. level is recommended. Training emphasis should be in the areas of production agronomy, soil fertility, animal husbandry and agricultural economics.

Project goals called for the graduate level training of 30 participants. To date, three have initiated graduate work and two are scheduled to begin in early 1985. Short-term, in-country training is estimated to have reached 50 percent of project goals.

20. PURPOSE

The purpose of the project is to "...strengthen and support MAP (now MAFA) institutions responsible for meeting objectives of the Ministry's agricultural production program". Progress towards each end-of-status (EOPS) condition is discussed below.

EOPS Condition 1: A Central MAP (MAFA) planning unit capable of analyzing, monitoring and formulating policy recommendations and planning future agriculture strategy.

This condition has been partially fulfilled. Policy making capacity of the MAFA has been improved as a result of work of the Policy and Economic Studies (PES) team. A single identifiable unit within the MAFA has not been established, but units concerned with policy formulation within the Planning Cabinet have been strengthened.

Given that the Planning Cabinet has had no organic law until late 1984, progress toward achievement of this EOPS condition has been hampered. In essence, the Planning Cabinet has not had the organizational or technical capability to provide counterparts to the PES team.

The new organic law will facilitate fulfillment of this condition. However, the GOP hiring freeze will not permit the Planning Cabinet to bring in additional qualified technical personnel. Full achievement of this condition by Project termination in FY1985 therefore seems unlikely.

EOPS Condition 2: An improved GOP agriculture sector strategy coordinating public, educational, and private institutions directed toward increasing production by small farm families.

Progress towards this condition is significant. While the strategy is not a written document, there are many manifestations of improvement. For example: a) the MAFA and IFADAP work in a completely integrated manner with private cooperatives in the entire limestone program from production to farmer application, b) a regional university now operates a major soils laboratory as a public service, c) faculty of a regional university work closely with a MAFA Regional Service in coordinating agronomic trials and farmer demonstration plots, d) a regional university is conducting critically needed micro-element soils research for the MAFA, e) all MAFA demonstration and lime and fertilizer research plots are carried out on small farmers' fields, f) the most successful animal production management program activities are conducted on private farms, and g) an integrated public and private program is responsible for farmer fertilizer recommendations.

Continued progress is being made toward achievement of this condition. A project extension would aid greatly in permitting further progress.

EOPS Condition 3: Regional program of agricultural development approved and being implemented in at least four regions.

This condition has been fulfilled each and every year of the project. Annual development programs are submitted by all regions in which the Project is concentrated. These are approved by the Project Coordinating Group and funded by the GOP. The fulfillment of this condition has been greatly assisted by the PIMS work in administrative management and budgeting.

EOPS Condition 4: Decentralized programs of agricultural sector support services to increase agricultural production which are effectively coordinated by the MAP (MAFA).

This condition is essentially synonymous with Condition 4. The programs implemented in the Regional Services are a result of the approved and funded regional plans. This condition has been fulfilled each and every year of the Project.

EOPS Condition 5: An integrated and coordinated agricultural development program in operation which makes key production inputs available to small farm families including credit, ground limestone, improved grain and forage seed varieties and breeding stock.

This condition has been fulfilled in terms of limestone, fertilizers and some improved cereal varieties. Significant progress is being achieved in development of improved breeding stock, animal management programs and corn forages. Credit is widely available to small farms, but not necessarily from Project resources. Less progress is being made in forage legumes for reasons cited above.

EOPS Condition 6: Strengthened extension services capable of reaching small farm families utilizing both MAP (MAFA) and farmer cooperative organizations.

This condition is being fulfilled, but somewhat unevenly. More progress has been made in strengthening cooperative organizations than in building the public extension service. However, over 1,100 of the total 1,455 person months of Project training have been devoted to the training of extension personnel. Even more training is required, especially in key technical areas.

A GOP hiring freeze has precluded permanent recruitment of new extension agents. A lack of an organic law for Regional Services has hampered improved organizational systems. In spite of these difficulties, the general perception prevails that the extension service is more effective today than at Project initiation. A primary reason for this is that agents now have something to extend—Project derived new technology.

EOPS Condition 7: Extension programs linked to the results of research but also providing feedback regarding farmer production problems which require further research.

This condition has been partially fulfilled. The extension service is conducting "Farming Systems" applied research. But except for soil fertility work, there is little direct relationship with the official agricultural research entities.

Officially, the research and extension systems have been joined under one Service in the MAFA. To date, a lack of an organic law for the new Service has precluded integration of research and extension activities. The official research entities have not embraced the concept and philosophy of "Farming Systems" in spite of great effort on the part of the Project to simulate this research approach. Some, but rather little progress has been made in this direction.

Recommendations to address this difficulty are many. It appears to be a long term activity that will come gradually with resolution of institutional problems, improved technical capacity and time.

EOPS Condition 8: A regular program of on-farm applied research and demonstration of improved soil fertility, improved varieties and production practices in the priority production areas.

As noted above (7) the extension service is conducting on-farm applied research and demonstrations. Over 1,000 demonstration fields are in place. The National Soils Laboratory is also conducting on-farm research. The small ruminants program operates its most successful activities on farms of producers.

Except as noted above (7) this condition is being fulfilled. The number of demonstration plots exceed by a magnitude of ten original project goals.

EOPS Condition 9: An effective and efficient credit disbursement system in operation making credit readily available to small farm families.

Project derived credit plays a small role in total national agricultural credit. Agricultural credit is widely available to all farmers. There appears to be relatively little demand on the part of small farmers for credit. The credit issues appear far more complex than simply establishing an effective and efficient credit distribution system.

NOTE: A high level credit team has just completed a comprehensive appraisal of Portugal's agricultural credit system. A report of findings and recommendations will be completed in early 1985.

EOPS Condition 10: Increased capacity and improved capability of government soil testing facilities in the Project area.

This condition has been totally fulfilled (see discussion in Outputs).

EOPS Condition 11: Increased capacity of government seed processing laboratories producing certified seed of improved varieties.

This condition appears inappropriate in that seed processing capacity has been and continues to be generally sufficient to handle incoming supplies of seed. The problem is inadequate production of important seed varieties, especially improved legume forage seeds. This matter has been addressed in the Forage Production (Output) section.

1. GOAL

The Project Goal is "to increase agricultural production and productivity". The Sub-Goal is "to prepare for the country's entry in to the European Economic Community, in a manner which minimizes possible negative economic effects for Portugal's agriculture sector".

Significant progress is being made toward achievement of both the Goal and Sub-Goal. The Project has stimulated the development of new soil fertility technology that increases crop yields by some 20 percent on farmers' fields. This technology is being rapidly adopted by farmers as evidenced by the sharp consumption increase in lime—a key input in the new technological package. The realized yield increases are resulting in improved livestock and livestock product offtakes thus enhancing both labor and land productivity.

Large numbers of individual farmers report enhanced production of cereals, forages and livestock. These reports are verified by extension agents. At the macro level, aggregate production increases cannot be discerned due to severely fluctuating weather conditions over the past four years plus poor statistical reporting.

The Sub-goal is by definition being accomplished: Portugal's agriculture can only be competitive in the EC marketplace with increased resource productivity. Economic policy analysis carried on under the Project has also greatly assisted in a modification of Portugal's agricultural policies to conform more closely with those of the EC.

Progress in achievement of the Goal and Sub-Goal is directly related to the Project's Purpose achievement. There are no other AID agricultural projects in Portugal. Other international donor projects are almost universally dead in the water. The Project strengthening of MAFA entities and direct work with private cooperatives is the reason the Goal and Sub-goal are being achieved.

22. BENEFICIARIES

Quoting from the Project Paper, "The direct beneficiaries of this project will be the employees of the MAP (MAFA) and other agricultural support institutions who receive training and technical assistance".

Restating from previous sections, the direct beneficiaries, as of the date of this evaluation, have received more than 1,455 person months of training. Some 177 men months of technical assistance have been provided and while their total contact hours with beneficiaries is unknown, it likely easily exceeds 60,000 hours. As a point of reference, this is equivalent to more than ten four year U.S. undergraduate degree programs.

The beneficiaries have been largely extension personnel. Other important beneficiaries have been (in descending order of person months of training) administrative management and budgeting personnel, agricultural credit

specialists, economic and policy analysts and decision makers, animal production specialists, forage production research and extension personnel, training specialists, limestone transportation and distribution specialists and soil researcher laboratory analysts.

23. UNPLANNED EFFECTS

Unforeseen positive impacts of the Project include a number of rather significant matters. Examples are:

Limestone Demand. The Project's efforts to stimulate limestone production have been more far reaching than originally anticipated. Over half of all limestone consumption in the country now moves outside of Project institutional framework. Simply providing an assured supply of limestone to farmers has stimulated use.

Limestone Prices. The Project's efforts to stimulate limestone production from numerous plants has resulted in a sharp drop in real prices over time. Competition has been stimulated and is working to reduce farmer prices of this important input.

Soil Testing. The establishment of nation-wide soil testing capacity and the incorporation of a soil testing program into extension activities has had a major effect on farmer perception of the worth of extension services in general. Of course, morale of the extension agents has markedly improved. Another major impact is that farmers now fully recognize that there is a scientific basis for fertilizer application. The broader educational value of this program has been very significant and has great and positive implications for farmer adoption of other new technologies.

Demonstration Plots. As a result of successful Project demonstration plots of farmers' field--in at least one region--farmers have requested the extension service to establish additional plots on their farms with the farmers paying all costs. In the one region where this is known to be occurring, the number of "unofficial" plots exceeds the number of official Project plots.

Impact of Private Sector. Perhaps one of the most significant unexpected Project effects has been the private sector's embracing of Project's program, goals and objectives. Without complete cooperation of the private sector, especially in the limestone program, the Project could have experienced very serious implementation difficulties.

Administrative Management. The Project's installation of Portugal's only modern budget and management systems has attracted sufficient attention that Decree Law in mid-1984 imposed a similar system for the entire Ministry of Agriculture (yet to be implemented). The fact that the Project has had reliable and accurate management data has sharply reduced GOP budget cuts for Project activities.

The "Pioneer" Effect. The Project is truly Portugal's pioneer effort in attempting to coordinate a complex, unwieldy and recalcitrant set of public and private entities in the achievement of defined objectives. It has worked. The demonstration effect for all sectors--not just agriculture--is extraordinarily significant.

24. LESSONS LEARNED

There are probably few, if any, truly new lessons to be learned from this Project. The "basics" known for years continue to prevail and have prevailed in this Project. But a re-statement of some of these "basics" is useful.

Agreement of Objectives. All parties directly involved in Project implementation—donor, contractor and host country—must agree to Project objectives AND be amenable to recognizing there are alternative means of accomplishing the objectives.

Leadership. Strong leadership, and leadership with an understanding of the development process, but without dogmatism is basic to Project success.

Language. Capability of the host country's language on the part of donor/contractor more than just facilitates a Project's goal achievement: it is often a necessary, but rarely a sufficient condition for goal achievement.

Consultant Effectiveness. Consultants are ineffective over the long run if national counterparts are not involved in defining their need in working closely with them. If a consultant is highly effective, every effort should be made to retain the individuals services over project duration if appropriate.

Private Sector Role. When in doubt as to whether a Project component should be more appropriately developed by the public or the private sector, always opt for the latter.

Cultural/Institutional Differences. Cultural and institutional differences from one country to another are significant, pervasive and must never be underestimated in Project implementation. The corollary: it takes much longer to understand these differences than would appear at first, second and even third glance.

Farmer Response to Innovation. If given any reasonable chance, farmers will always respond to economically attractive and managerially feasible new technological enovations. Some farmers will take longer to respond.

Project Development. Defining broad, rather than narrow objective in the Project development fase and then permitting capable individuals to find the most appropriate means for acheiving these objectives is preferable to narrow and highly specific objectives definition. This may be at odds with current AID thinking. But the underlying premise is that sufficient information is rarely available during Project design to anticipate the realities of Project implementation.

PROCALFER

PROJECT EVALUATION

OCTOBER 29 - NOVEMBER 16, 1984

PORTUGAL

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V. GOALS AND OBJECTIVES OF THE PORTUGAL AGRICULTURAL PRODUCTION PROGRAM

As stated in the scope of work given the evaluation team "the central concern of the evaluation is to provide productive input into future project planning and implementation activities to achieve project objectives". This requires a thorough evaluation of the experience, progress, and problems of the Project over its first four years as a basis for future planning and action. As the Government of Portugal has requested a two year extension of the Project through FY 1987, this evaluation is expected to provide a substantive input into the form and focus of that extension.

An effective evaluation requires a clear understanding of Project objectives and the scope of activities anticipated at the time the Project was activated as well as any subsequent modifications in the Project Agreement. Were the same expectations held by the grantee (GOP) the grantor (USAID) and the contractor (OICD/USDA)? If those objectives are highly generalized and interpreted differently by the different Project participants, conflicts are bound to result - especially if the communication between parties is deficient. It is therefore very important to assess the Project objectives held by the Portuguese and Americans in evaluating the performance of the Project as well as for the purpose of making future recommendations.

The objectives of PROCALFER (which translated means a program for correction of soil acidity, fertilization, and forage production) more developed by Eng. Jose de Almeida Alves and his associates from the beginning of discussions with USAID about supporting this Project. In his role as Chairman of the Portuguese Coordinating Committee administering PROCALFER these objectives have been consistent from the start. An early statement of objectives found in a preliminary document dated December 1980 which carries the names of the Portuguese Ministers of Agriculture and Fisheries (MAP) and Finance and Planning (MFP) is as follows:

1. Promote the correction of acid soils, particularly those in the North which are used for corn production and forages.
2. Increase fertilizer use on these soils as required by the crops grown on them - based on experimental results.
3. Increase the production of pastures and forages - under both intensive and extensive cultivation. (Forages include feed grains such as corn harvested for grain as well as silage).
4. Help strengthen the Extension Services at the regional and sub-regional level - especially as related to correction of soil acidity, increased soil fertility and increased forage and pasture production.
5. Promote research on soil fertility and better utilization of soils.

Other central objectives have included the need for better seeds, and for subsidized credit to producers, distributors and farmer users of limestone. Later increased livestock production particularly sheep and goats have been included as major PROCALFER activities. However the five objectives listed above are still regarded as the central focus of PROCALFER by the Coordinating Committee (CC). These objectives are focused on physical production and are largely technology oriented. While not counter to broader institutional development objectives, they are not emphasized.

AID goals and project purpose encompass PROCALFER objectives but have been more

broadly focused with emphasis on institutional development. In more global terms this goal was to help increase Portugal's agricultural production and productivity, and prepare for entry into the EEC in a manner that would minimize the possible negative economic effects for Portugal's agricultural sector (see AID Project Design Summary Logical Frame Work). The stated project purpose was to "strengthen and support Ministry of Agriculture and Fisheries (MAP) institutions responsible for meeting objectives of the Ministry's Agricultural Production Program" (namely PROCALFER). This institution building focus is also found in the PIO/T dated December 31, 1981. (Attachment 1, page 7 of 27). Particular emphasis was to be given to those institutions responsible for research and extension, including the Ministry's Regional Offices as well as several of its central technical offices and agencies. The breadth of the planned efforts is illustrated under the heading Focus and Structure of Services AID/PIO/T attachment 1 pp. 10 and 11 of 27.

"a) Institutions and Areas to Receive Support . The institutions to directly benefit from these services are listed below along with a brief description of the major problem-areas, disciplines, and/or programs under each, toward which this assistance is to be directed:

- (1) National Research Institute (INIA): While support to research will not be restricted to any particular set of areas, the main focus will be on soil correction, crop and soil production, and pasture/range improvement, with additional attention to farm management, production economics and farming systems.
- (2) Rural Extension Service (DGER): There will be little focus on production areas or technical disciplines; assistance and training will be programmed primarily toward extension techniques, methods, communications and administration.
- (3) MAP Planning Office: Assistance here is focused on five main areas: policy, marketing, economics, transportation and development training.
- (4) Regional Offices of MAP: Contrary to the DGER, assistance to the Regional Offices will emphasize the strengthening of technical disciplines and will be essentially across the board; However content will vary between individual offices depending on identified problems and needs. (Regional Plans will largely dictate).
- (5) Seed Improvement Service: Assistance will be focused on cereals, forages, pastures and grasses, but functionally will include the production, processing and distribution of seed.
- (6) Soil Mapping Service: Assistance will focus on strengthening and expanding soil testing capabilities and services, but will also involve support to research and extension in a broad spectrum of soil and soil-resource areas.
- (7) Agricultural Credit Institute (IFADAP): Technical assistance to this institute will be rather limited, even though credit is an important element to overall goal achievement. Assistance will include consultant services and training. Training and technical assistance to the DGER and MAP Regional Offices is covered elsewhere.
- (8) Veterinary Services: Support to this MAP Office will consist of attention to livestock disease, health and nutrition problems, addressed through assistance to

research (INIA) and extension (DGER) efforts.

b) Geographic Orientation. Although the assistance and services to be provided under this PIO/T will not have strict geographic limitation, the main emphasis will be on the four northern regions of the country (especially Entre Douro e Minho and Beira Litoral). Wherein the MAP/SCF-IFP Program is to be primarily focused. This is for several reasons:

- (1) These regions have more severe soil acidity problems.
- (2) Corn production is concentrated in this part of country.
- (3) These regions enjoy higher rain fall and have good potential for increased production.
- (4) These regions have generally being neglected because of problems of small farm size, severe land fragmentation, and low agricultural investment.

The project was very broadly written and called for a broad range of activities to be undertaken. At the same time the Portuguese counterparts managing PROCALFER were not always in agreement with all activities OICD and AID wished to implement. This resulted in a difficult situation with two sets of activities underway - one with the concurrence and support of the CC and another quite independent, some with and some without Portuguese counterparts. In evaluating the accomplishments of the various sub-project activities it is important to distinguish between whose objectives were being pursued and their resulting effectiveness.

In term of project experience and potential comparative advantage of Portuguese agriculture upon entry into the EEC, is the project focus on the agriculture sectors greatest medium and longer term opportunities? Analysis of the Arizona and Stanford studies indicate that forages and livestock production - particularly sheep will become more profitable. Some marginal lands in the south now producing wheat under subsidized prices must shift back to pastures. Portugal imports a major percentage of its feed grains of which corn is a primary importance. "For traditional corn production, emphasis on improving yields, opening up marketing opportunities and improving soil fertility is likely to be repaid by an increase in social profits" (PES Team, "Comparative Advantage and Policy Choices in Portuguese Agriculture", December 1982. p. 20). In the north where small farmers with 2-3 cows are linked to traditional corn production there will be great pressure to modernize and specialize dairy operations (community milking parlors, improved breeds, nutrition and disease control) as well as to increase the production and productivity of forages. A "whole farm" approach using improved technology will be needed to compete. Livestock and forages including corn are a major part of Portuguese agriculture.

The feed/forage/livestock sector is the principal focus of current PROCALFER activities and should continue to be in the limited period remaining in the project. Many problems which fall directly in PROCALFER's current concern remain to be addressed. It would be counter-productive for the project to pursue other commodity lines at this juncture even if some had potentially greater comparative advantage. Major focus of the project should continue in the North where small farms predominate and some of the greatest farm adjustments will be needed. However, work on sheep production and dry land forage systems should be emphasized in the South.

The relationship of institutional development and increased agricultural productivity, are closely related. There are however several ways to achieve institutional development apart from building formal organizations. People are the basis of institution building and emphasis needs to be given to helping those in the formal structure do their job through more resources and training. It is

recognized that many problems of communication, responsibility, and the flow of resources exist in the formal MAFA structure. When prospects for changing the structure are virtually non-existent the only feasible approach is to work more directly with those in the system responsible for agricultural technology generation and dissemination to farmers. This means the project should focus more closely on the production aspects of the technology innovation process in the areas of feed, forage, and livestock production rather than on the structure of the system. Human resource development of Portuguese scientists through short and long term training is the key to ultimate improvement in the system.

Whenever opportunities exist to work with the private sector, they should be pursued to the extent that it is acceptable to the host country. As the project agreement is between U.S. and Portuguese Government with the MAFA as the central focus, most project activities must be carried out through those official channels. However, cooperatives have been supported and utilized to carry out some of the project objectives i.e. limestone production and distribution. Perhaps they could be vehicles for channeling PL 480 credit to farmers for limestone and fertilizer sold by the cooperatives.

VI. EXECUTIVE SUMMARY

The Portugal Agricultural Production Project has made substantial progress in its first four years. However, much remains to be done in order to realize more of the Project's potential in the next three years. There has been a lack of integration of goals and activities between USDA/OICD and the PROCALFER Coordinating Committee responsible for the Project. Differences in Project objectives have existed in which AID and USDA/OICD pursued broader institution building goals while the Coordinating Committee focused on more limited objectives to correct soil acidity, promote the use of fertilizers, and increase production of corn and forages. The broader institution building goals have been further frustrated by problems of communication and conflict within the Ministry of Agriculture, Forestry and Food (MAFA) both at the central level in Lisbon and between the center and MAFA Regional Offices. Attempts to strengthen capabilities and communications between INIA, DGER, MAFA Planning Cabinet, and the Regional Offices of MAFA have often been frustrated. Institutional constraints must be more fully taken into account in planning and implementing future project activities.

ACCOMPLISHMENTS

Project activities have been implemented under twelve sub-project headings including limestone, soil analysis, forage production, extension, farm practices/systems, agricultural research, agricultural credit, PIMS, PES, animal production, agricultural marketing and trianing design (see Table 1). Significant results have been obtained from several of these activities.

- (a) A limestone production and delivery system is in place. The PL 480 credit program has made an important contribution towards this objective. Limestone is available to farmers when and where it is needed.
- (b) A soil testing capability has been established and is functioning throughout the Northern regions. Soil tests are being made to determine lime and fertilizer requirements.
- (c) A extensive system of demonstration plots using lime and fertilizers have been implemented through PROCALFER. Further knowledge is needed on the productive effects of economic returns to different level of application of limestone and ferlitizer. Potential yield levels are being determined. Extension agents have received training on how to conduct demonstration trials.
- (d) Correction of soil acidity and fertilizer use have become commonly accepted farmer practices. Much of this can be attributed to PROCALFER. Interest in production research and extension by the staff of the Regional Offices of MAFA has been stimulated by PROCALFER. With additional resources, technical support and training agricultural technicians in the regions will be able to expand their activities.

Unfortunately the pasture and forage production program is lagging behind in the central thrust of PROCALFER activities. There is a great need to expand work in forages including - identification of most desirable species; grass and legume combinations, seed production, testing and distribution; forage use handling and storage.

The agricultural credit program has included the training of some sixty seven extensionists to better advise farmers about credit and how to apply for credit. However, farmer access to PL 480 credit through IFADAP has been a total disaster. Farmers need a source of subsidized credit but the current system is not working. The PL 480 credit did serve a useful function to promote limestone production and distribution through cooperatives. The subsidy system to reduce limestone price to farmers has also worked well.

The PIMS management and budgeting system- has been integrated into PROCALFER support activities in the regions and in transactions with the Planning Cabinet. This system has been useful in promoting planning, budgeting and accounting for funds expended. There are possibilities for it to be integrated into one or more Regional Offices and possibly the Planning Cabinet.

The animal science program focused on sheep and goats has been very successful. It utilizes a visiting consultant who comes to Portugal periodically and works with some excellent Portuguese counterparts who are committed to the program. This activity has only recently being fully integrated into PROCALFER.

Policy and economic studies (PES) by Arizona and Stanford Univesities relating to Portugal's impending entry into the EEC have been well received by the MAFA Planning Cabinet but have been carried on as an activity outside the PROCALFER Coordinating Committe. While these studies have been very useful, it has created a conflict in project implementation which has now been rectified. All these activities will now be submitted to the Coordinating Committee for decision about support.

The training design activity has not been very successfully implemented. The approach by USDA/OICD has been to design an overall program to create training capacity within the DGER and Regional Offices as well as to deliver subject oriented training. It has been dificult to get Portuguese approval for an overall design plan. Efforts are now proceding to implement a more technical and subject matter training program oriented toward agricultural production activities. Training have lagged far behind original expectations.

Consultancies in farm practices/systems and agricultural marketing were initiated without Coordinating Committee approval and without Portuguese counterparts. The consequences of this were that nothing happened after the reports were written - even though both are important topics for PROCAFER if properly integrated into the total program.

Overall some 177 person/months of consultants have been provided over the past four years. Those most effective had Portuguese counterparts and continued with follow-up visits over a period of years. With the exception of the PES, sub-project activities considered to be successful had full support from the Coordinating Committee. It is the judgment of the Evaluation Team that there are too many sub-projects which are fragmented, and not well integrated into an overall program. More focused production programs which combine research, extension, economic analysis and training activities are recommended for the remainder of the project.

FUTURE PROJECT ACTIVITIES

A light of what the Project has accomplished to date and the difficult and uncertain institutional environment under which the Project must function, it is recommended that the major thrust of PROCALFER in the next three years should emphasize increased agricultural produciton at the regional level. The Team feels

that interest and potential capabilities exist in the MAFA regional zones which can be utilized to make a real impact on increasing agricultural production of feed, forage, and livestock products. While lime and fertilizer have become reasonably well accepted practices by farmers, the most economic levels of application are not well known for major cropping and livestock systems and soil types in the respective regions. There are no "packages of technology" to recommend to farmers.

As national research capabilities in Portugal have diminished and the possibilities of linking them to regional needs are limited, it is proposed to establish "Regional Agricultural Production Teams" in MAFA regions to increase their capabilities to applied research and extension. Emphasis would be given to implement agricultural production programs designed to increase the efficiency and productivity of the most typical farming systems in the respective regions. These Teams would consist of specialists in soil fertility, production agronomy, animal science and farm economies who would work together in testing new technologies and facilitate adoption of those practices found to be most profitable for farmers. This would include research trials on optimum levels of lime and fertilizer application. These "regional specialists" would perform applied research and extension functions and work mainly with the extensionists in their respective sub-regions.

It is envisioned that a type of systems approach would be used in which the "production teams" would initially work on no more than one or two typical systems in their zones. Corn/rye grass/dairy is a very typical system for small farmers in Northern Portugal. Field research would be conducted to look for the best practices to increase corn production through lime, fertilizer, hybrids, and improved cultural practices. The same procedures would be followed for pasture improvement. Improved nutrition and disease control for dairy cows would also be analyzed economically to see which set of practices were most profitable from the stand point of the total farm enterprise.

A resident long-term production specialist is recommended to work with the MAFA Regional Directors of Agricultural Production in the respective regions to help them develop and implement their own production programs. In many cases these individuals are the regional PROCALFER representatives and they would be the counterparts for the long term specialist. He would need to be working in the regions most of the time in helping train the local specialists and help design an integrated research, extension and evaluation program. Additional outside advisors would be called in as needed and requested from the regions. A program of both short and long-term training will be needed to strengthen capabilities of the four regional specialists. U.S. long-term project staff should also have professional roles in activities where they have competence.

INIA and Portuguese universities should be utilized to the extent they wish to cooperate and support the regional programs. The PIMS budget process would be a good system to use in programming this cooperation.

It is very essential for the Coordinating Committee to be convinced that this approach will be the best solution for PROCALFER emphasis in the next three years and that they sell it to their respective agencies. Most of the current sub-projects can be included under the proposed regional approach. Economic analysis should focus on the analysis of profitability of different production systems in the regions although some macro policy analysis could continue. Most of the work on forages and animals as well as training would be focused on this new regional approach.

For longer term continuity and capability it is strongly recommended that as many Portuguese be sent for MS degrees as can be identified and willing to study in the U.S. They should study in one of the four areas identified where regional specialists are needed.

VII. PROJECT BACKGROUND

Post-revolution Portugal (after 1974) has suffered from serious economic problems including declining productivity, reduced domestic savings and negative investment in most of its economic sectors. The result has been high inflation, large public deficits and, until recent months growing import/export imbalances which have led to adverse balance of payments problems and continual currency devaluations.

One of the major contributors to the nation's economic difficulties is the agricultural sector. Despite generally favorable climatic conditions and a reasonably good natural resources base, agricultural output has stagnated, even deteriorated, over the past two decades.

Imports of food and other agricultural products have grown more rapidly than agriculturally-based exports. Growing disparities between rural and urban income-levels have contributed to a major exodus from rural areas.

Since the revolution, the situation has worsened. Aggregate demand for food has increased with the inflow of 700,000 refugees from former African colonies. Combined with modest rises in income, this has resulted in sharply increased demands for animal proteins, and in turn a growing need for imported feed grains and oilseeds. Today, the agricultural imports account for over 20% of all imports and are the single largest import category.

Portugal is expected to enter the EC in 1986. Its internal market will be opened to European competition. As a condition for membership, internal subsidies to producers and consumers will have to be gradually abolished. Over time, agricultural prices must equilibrate to EC levels. For a few commodities, there will be a price incentive to domestic production. For most, however, the incentive will be negative. Overall, the impact of EC accession on Portugal's agriculture is expected to be painful. Moreover, because major agricultural imports (grain and oilseeds), will be acquired at higher EC price levels, the agricultural balance of trade will worsen. The impact will be put even greater pressure on the nation's already difficult foreign exchange position.

The central agricultural problems to be addressed are twofold — increased output and increase resource productivity. A sustained output increase will reduce agricultural imports and thereby foreign exchange expenditures. Increased resource productivity will permit Portugal's agriculture to compete more effectively with that of the EC.

Constraints to increase agricultural production and productivity are structural, institutional, political and technological. No list of specific factors will be complete, but would certainly include the large number of small, highly fragmented farms of Northern Portugal. The difficult agrarian reform problems in the Alentejo; a perverse and complex system of price controls and subsidies; unresponsive agricultural research and extension systems; a cumbersome, highly decentralized agricultural bureaucracy; an inadequate agricultural credit system; and antiquated marketing system and a generally, but not universally obsolete agricultural technology.

The problems of agriculture appear to be recognized by the Government and this project is a manifestation of these concerns. At the request of the Minister of Agriculture in 1979, AID provided a consulting team to conduct an assessment of the agricultural sector, identify key problems and make recommendations for corrective action. After the team's presentation of findings in December 1979 a group was appointed within the Ministry of Agriculture to develop a comprehensive program to increase agricultural productivity and output.

A preliminary program was completed at the central planning level and approved by the GOP in April 1980. It was subsequently issued to MAFA Regional Services for each to develop programs reflecting local problems and needs. Further meetings of central and regional officials refined the program.

The Project Identification Document (PID) was completed in March 1980 and approved in Washington May 1980. The Project Paper was then written and approved in August of the same year and the Grant Agreement between Portugal and the United States was signed September 16, 1980. The Project management was arranged via a PASA with USDA/OICD. The first OICD resident person arrived February 1981.

VIII. STATEMENT OF WORK

The evaluation addressed and made recommendations concerning five central issues:

1) Strategic Objectives (Goals and Purposes).

- In light of accumulated project experience and knowledge of the potential comparative advantage of Portuguese agriculture vis-a-vis the EEC, is the project focusing on the agricultural sector's most productive medium and long term opportunities? If not, could the final phase of the project do more to emphasize potential comparative advantage?

- To what degree are the project's institutional development objectives complementary to or in conflict with the project goal of increasing agricultural resource productivity and output? Should more or less emphasis be given to MAFA institutional development objectives?

- Could the project goal be more effectively and efficiently achieved by shifting the relative emphasis of institutional development from the public to the private sector?

- To what degree is institutional development, public and/or private, a necessary condition for the achievement of the project goal? To what degree a sufficient condition?

- In view of the response to the first question in this section, should project efforts be geographically more narrowly or more broadly focused?

2) Project Components/Outputs

- In view of the responses to the questions in (1) above, is the content, scope, and relative emphasis of present PROCALFER project components appropriate for the attainment of the project's objectives, purposes and goals?

- Are the activities carried out under the project components achieving project objectives of increasing agricultural production, productivity and long term institution building of the MAFA and the Regional Services? If not, what specific and feasible measures are recommended to improve capacity to achieve project objectives?

- Are the project components in appropriate balance relative to the achievement of project objectives? If not, what specific reordering of relative magnitudes is recommended to achieve project objectives?

- Are there important constraining gaps in project components or activities within project components that will significantly limit achievement of project objectives? If so, what component or activity additions are recommended to achieve project objectives?

- Are there developmental assistance approaches that are now unutilized or underutilized in carrying out project activities that offer significant promise for enhancing the achievement of objectives?

- See annex 1 for questions related to specific project components.

3) Project Resource Use

- Is short term technical assistance effective? If not, how can it be made

effective for the balance of the project?

- To what degree has it been demonstrated that training, either in Portugal or in the U.S. has, or has the potential to contribute significantly to the achievement of project objectives? What specific types of training have proven more/less effective? Why?

- To what degree have short term technical assistance and training activities been coordinated? In what way is the degree of coordination related to effectiveness?

- Does the project warrant the assignment of a full-time resident training advisor?

- Can utilization of other project resources — grant funds, PL 480 monies and commodities be made more effective?

4) Mutual coordination, support and implementation of PROCALFER and a) Central Ministry (MAFA) programs and activities; b) MAFA Regional Directorate (Regional Services) programs and activities; and c) extra-ministerial (non-MAFA) entities and institutions including private sector entities, universities and ministries.

Are there unutilized or underutilized opportunities to enhance project effectiveness via mutual coordination with Central MAFA, Regional Services and extra/ministerial entities?

- What factors constrain mutual coordination, support and implementation of PROCALFER and Central MAFA, Regional Services and extra-ministerial entity activities?

- Can the PROCALFER Coordinating Group be strengthened and made more effective to improve mutual coordination, support and implementation with central MAFA, Regional Services and extra-Ministerial entities?

- What specific and feasible measures can be taken to improve mutual support, coordination and implementation of PROCALFER and Central MAFA, Regional Services and extra-ministerial entity programs and activities?

5) Project backstopping, monitoring, management and servicing.

- Is project backstopping, monitoring, management and servicing of the project by USDA/OICD/Washington, USDA/OICD/Lisbon, AID/Washington and AID/Lisbon effectively serving project needs? If not, what specific actions are recommended to more effectively serve project needs?

IX. EVALUATION METHODOLOGY

An orientation period of two days was scheduled in the Offices of OICD/W for the evaluation team prior to departure for Portugal. The orientation included meetings and briefings with individuals involved in project management and implementation and review of documents including the Project Paper, Grant Agreement, previous evaluations, selected Consultant Reports and other project documentation as deemed appropriate by AID/W and OICD/W. One set of the recent World Bank Agricultural Sector Review was also available for use by the team in Washington and Portugal. The orientation included formal team planning meetings to establish member roles and responsibilities in the evaluation exercise.

The evaluation team worked in Portugal with Portuguese counterparts in conducting the evaluation. Counterparts represented entities independent of PROCALFER. The methodology followed by the evaluation team and counterparts included the following:

1) Document review. Documents reviewed included PROCALFER annual reports to the Minister of Agriculture, OICD and AID project reports, consultant reports, PROCALFER management reports and documentation on project component activities (empirical data on limestone distribution, demonstration plots, extension field days, research results, soil analysis, credit disbursed, training and etc.), summary documents prepared specifically for the evaluation and other documentation.

2) Briefings were prepared on the overall project and other major components of the project and were presented to the evaluation team and counterparts. These briefings provided a description of the evolution of activities, progress toward meeting project objectives, empirical data presentations, perceived constraints and recognized strengths. These briefings were presented by the individuals responsible for the project component early in the evaluation schedule.

3) Interviews. Interviews were held with key public and private sector individuals in the capital and at four regions. Entities and individuals represented included cooperatives, Regional MAFA Directors and staffs, regional PROCALFER coordinators, Directors of Regional MAFA Services (extension, training, etc), extension workers, IFADAP, Directors of Central MAFA Services (research, extension, training, etc.), university presidents and faculty. Interviews with representative farmers in three regions were also scheduled.

4) Data Review. Project baseline and measurement data was presented in the prepared briefings and background documentation. In addition, an inventory of computerized project data was prepared. Other data not presented in briefing and background documents, but requested by the team were promptly made available.

The evaluation team consisted of four discipline professionals (outside contract personnel): a) an Agronomist, b) an Animal Scientist with production and management expertise, c) an Agricultural Economist, and d) a Public Administration Specialist with emphasis in project management and budgeting, the AID/W Backstop Officer and a member of IFADAP appointed by PROCALFER. The Agricultural Economist served as team leader.

The team represented different US entities involved in agricultural development, AID, USDA/OICD, non profit agricultural developmental entities and Land Grant Universities and a knowledgeable portuguese engineer agronomo. The diversity of entity representation on the team expanded the team's experience base and maximized consideration of future project approaches and strategies.

All team members had strong discipline competencies and reputations plus direct experiences in comprehensive agricultural development projects. The four contract members of the evaluation team possessed varying Portuguese language capabilities.

However, in all cases they were able to work in Portuguese.

The team leader assigned each member responsibility for the evaluation of Sub-projects (each sub-project to be evaluated using the following format).

- (a) Relation of sub-project activities to project objectives (ag. production, institution building).
- (b) Inputs
(U.S.) - Resources supplied (technical assistance, commodities, proportion of budget)
Portuguese - Resources supplied
- (c) Outputs (quantitative and qualitative)
 - Reports, people trained, new activities generated, etc.
 - What has been accomplished, in activities now self-sustaining?
- (d) Defficiencies and problems in implementation of activities.

Recommended project emphasis next three years

- (a) Assumptions
- (b) Increase, decrease, or change in form of sub-projects
- (c) New activities
- (d) Summary of major recommendations

Mutual Coordination, Support and Implementation of PROCALFER activities

- (a) With central MAFA
- (b) With regional MAFA programs
- (c) With universities and/or private sector

Backstopping, Staffing, and Management roles in Project

- (a) Field staff
- (b) OICD/Washington
- (c) AID/Lisbon and AID/Washington

X. OUTLINE OF TEAM REPORT

- I. Purposes and objectives of the Portugal Agricultural Production Program.
 - Portuguese vs. U.S. objectives
 - comparative advantage of Portuguese agriculture/regional emphasis.
 - institution building relation to agriculture productivity and production objectives.
 - potential role of private sector in meeting project objectives.

- II. Evaluation of Sub-Projects (each sub-project to be evaluated using the following format).
 - (a) relation of sub-project activities & project objectives (ag.production, institution building).
 - (b) Inputs
(U.S.)- resources supplied (technical assistance, commodities, proportion of budget)
Portuguese- resources supplied
 - (c) Outputs (quantitative and qualitative)
 - reports, people trained, new activities generated, etc.
 - what has been accomplished, in activities now self-sustaining?
 - (d) Deficiencies and problems in implementation of activities

- III. Recommended Project Emphasis next three years
 - (a) assumptions
 - (b) increase, decrease, or change in form of sub-projects
 - (c) new activities
 - (d) summary of major recommendations

- IV. Mutual Coordination, Support, and Implementation of PROCALFER activities.
 - with central MAFA
 - with regional MAFA programs
 - with universities and/or private sector

- V. Backstopping, Staffing, and Management Roles in Project
 - Field Staff
 - OICD/Washington
 - AID Lisbon and AID Washington

Individual Team portions of the report covering sub-areas follow this outline as it applies. However, all members did not complete all segments of the outline. For this reason the roman numeral outlining is not followed, and account for the presence of some seeming by unrelated roman numeral heading in some reports.

LIMESTONE PRODUCTION, TRANSPORTATION AND DISTRIBUTION

(A) Relationships of Subproject Activities

This subproject was undertaken to assist PROCALFER with production (mining, crushing, bagging) and distribution of agricultural limestone for sale to farmers. Emphasis was to increase lime application on the highly acid soils in Regions 1-4 in Northern Portugal. These regions are characterized by small landholders, pastures and hay lands and regions where corn is grown for both grain and forage. This undertaking included cooperation with the limestone crushers, Union/Cooperatives, trucking companies and railroads. The target was to develop a production-distribution system that could increase limestone production and availability from a use of 25,000 tons in 1980 to a system to handle 380,000 tons by 1986. A secondary objective included assistance to limestone production-distribution for the southern regions of Portugal.

(B) Inputs

Inputs include 24.25 person months of technical assistance. Consultants have worked through PROCALFER and with Union of Cooperatives, railroads, trucking companies, Regional Directors and Coordinators, extension person, CODICAL and other entities. Two (2) 4 week U.S. study tour courses in Agricultural Marketing, Transportation, Economics and Cost characterization and logistic have been provided as individual training. A two (2) week U.S. study tour was completed for 12 Cooperative Executives. A two (2) week short course in transportation economics for 11 people was conducted in Portugal. The only capital items were four (4) limestone spreaders imported for feasibility-demonstration purposes. Through 1984, total PASA cost of \$231,041, 7% of total, local cost of \$2370, 1% of total has been expended. Inputs from the Portuguese side come from MAP, cooperatives and other areas of the private sector as related to limestone production and distribution. Evidence is available that large inputs into production, regional storage, and use subsidy has been expended to-date in the program. Funds have been funneled through CODICAL (farmer subsidy) and IFADAP.

(C) Outputs

The outputs from this subproject are evident in many areas. A limestone transportation, distribution and cost analyst has been trained for MAP and serves a PROCALFER staff function. He has developed a good working relationship with the limestone production-transportation-marketing industry and developed a movement reporting system making available up-to-date data. The major use of limestone in Portugal is for non-agricultural purposes of road construction, building materials etc. Total capacity in all areas is beyond the scope of this evaluation. Major expansions in production of agriculture limestone has occurred in the Northern one-half of Portugal. The opening of a new plant near Vila Real is expected to provide cost advantage to the northeastern regions. One plant in Region 2 has closed because of decline in highway and construction limestone. The opening of the new plant near Vila Real will provide an estimated 40,000-60,000 ton production capacity in the northern 4 regions to reach a overall capacity of 270,000-390,000 tons annually. Production and distribution of limestone in these 4 regions has undergone the following increase:

YEAR	TONS
1980	20,000
1981	52,000
1982	70,000
1983	78,000
1984	120,000 (*)

(*) Estimates of subsidized and non-subsidized movements.
 July 18, 1984 report James H. Lauth and Dr. Ken Casavant.
 Portugal Agricultural Limestone and Distribution Program.

This is an estimated 6-fold increase in limestone use over the past five (5) years targeted into the area of greatest need. Approximately 35-40% of this limestone moves without the subsidy program available through CODICAL or IFADAP. Efforts are presently underway to look at bulk systems to move limestone from crushing plants to bagging facilities to or near final distribution points. Potentially promising bulk systems used for cement storage or large bags could aid in cost reduction at the farm level. Numerous cost analyses and cost-benefits relationships have been completed during various stages of this subproject. The internal rate of return (IRR) [1] of 61.5 percent was calculated through the relationship established by comparing discounted benefits with economic costs, farm and off farm, associated with total cost of proposed production and distribution. Using available corn grain yield data, with one year pay out, a cost benefit ratio of over 3 was calculated. The training and installation of methods to calculate lime production and distribution cost appears to be a major contribution. Development of subsidy maps proves helpful and still being used.

(D) Deficiencies, Implementations Problems

Limestone requirements were projected both from a application and use side and from a production goal side. The former appears more appropriate and consequently, used as a subproject goal. Three estimates were collected and serve as proposed application-use market goals [2].

YEAR	MAP GOAL	REG. SER. GOAL	SUGGESTED GOAL	ACTUAL ACHIEVEMENT
1981	95,000	18,000	52,500	52,000
1982	219,000	53,000	90,000	70,000
1983	266,000	98,000	150,000	78,000
1984	302,000	168,000	250,000	120,000 (*)
1985	340,000	241,000	350,000	
1986	380,000	—	380,000	

(*) Estimated.

The quantity of limestone applied is close to the goal formulated from the

Regional Services than from the other estimates, which suggests they have a better understanding of the constraints and capability to reach a realistic goal. Inability to reach the more ambitious goals does not appear to be a lack of success from this limestone production, transportation and distribution subproject because, limestone was found to be available at all cooperatives visited in the northern 4 regions. Bringing to fruition feed and forage research, education and extension activities utilizing the improved soil testing facilities still have yet to fully impact lime use. In the northern regions many farmers with small and scattered fields presents problems with the physical spreading of the lime. Assistance to modify, adapt and the development of some animal drawn spreaders available through leasing from local cooperatives appears in need of technical assistance to help achieve the desired goal of application. The aspects of research, education and training to strengthen regional programs in feed and forage production that can impact lime use will be covered in other sections. To bring establishment of new forage species and varieties under adequate lime application, by changing the lime subsidy program to establishment of new forage seedings program appears in order when present subsidy program is phased out.

(E) Activity in Future

The success of the limestone program suggest only very limited activity in the future to fine tune the bulk movement part of the program. Some assistance in the development and adaptation of animal drawn spreaders available by leasing through the cooperatives will need some limited inputs.

FOOTNOTES

- [1] Lauth, J.A., J.R. Snitzer and R.J. Tosterud, 1981. Agricultural Limestone Distribution Study for Northern Portugal. Report February 9, 1981. Page 75.
- [2] Lauth, J.H. 1981. Report on Northern Portugal Agricultural Limestone Distribution Program. Report November 23, 1981.

SOIL ANALYSES

(A) Relationship of Subproject Activities

The major objective of the soil analysis subproject is to improve the ability and capacity of the soil testing laboratories to promptly analyse and interpret lime and fertilizer recommendations for farmers. A increase in capacity and accuracy to provide faster service was needed along with a need to meet an increase in demand expected through fertilizer and lime promotion/subsidy and other programs. A change based on recent research to interpret soil test results into lime and fertilizer recommendations to maximize economic returns to farmers became an important function of the activity. There are six laboratories included in the improvement project of which five are directly involved in soil testing. Two of the soil testing laboratories are outside MAP, but under contract to provide soil testing services to the Ministry programs.

(B) Inputs

Inputs have been both through technical assistance and capital purchases in the form of laboratory equipment. The project imported \$80,000 in equipment for use in increasing the capacity of each of the laboratories. The breakdown and location of the equipment list is available. A computer system is on order for the lead laboratory, Rebelo da Silva, a terminal and printer for IUTAD (Vila Real) and suggested a computer for DREDM (Porto). The QUIMIGAL laboratory already has a Wang computer. These are expected to arrive and be programmed to complete interpretation of soil test results in early 1985. Whenever possible, glassware racks and other equipment designs were developed and locally constructed with PROCALFER assistance.

Remodeling at the laboratory Rebelo da Silva and DREDM (Porto) was also completed with PROCALFER assistance. Technical assistance, outside of equipment improvement has included; laboratory design modifications to improve the flow of samples within the laboratory; introduction of new analytical methodology to speed up and improve the accuracy of phosphorus soil test; suggest and assist in the introduction a organic matter test and use of SMP buffer system for lime recommendation; organizing a working group composed of leaders from each laboratory to meet annually to discuss and exchange developments, needs etc. in soil testing and interpretation; assist in developing a new soil sample-interpretation information sheet complete with instructions on the reverse side; development of new soil test interpretation tables based on presently available fertilizer response data; a new system to interpret lime requirements based on desired pH for the crop; worked with limestone group to develop conversion factors of limestone quality into tons a particular limestone needed to supply the necessary neutralizing material; and addressed some of the issues concerning aluminium toxicity and liming, micronutrient testing, subsoil fertility, testing for nitrate-nitrogen in the Alentejo. Through 1984, 4.5 man months of consultantship have been used with PASA expenditure of \$149,894, 5% of total, and 2,899 of local cost, 1% of total cost. There is not a clean breakdown of consultant cost and equipment cost beyond the \$80,000 purchase of laboratory equipment. Paper soil samples bags have also been purchased to be used in soil sample collection.

(C) Output

The most tangible measure of the output is the increase in number of samples analyzed annually, as follows:

Laboratory	1980	1981	1982	1983
		Samples	Annually	
DREDM (Porto)	5000	8520	6881	7127
IUTAD (Vila Real)	—	2677	4403	6732
QUIMIGAL (Sacavem)	4300	4100	4390	5248
Rebelo da Silva (Lisboa)	7845	16379	20497	15031
DRAlg (Tavira)	1770	1835	2083	2177
TOTALS	18915	33511	38254	36315

This indicates the increase in use of soil testing reflecting the impact of this and other programs promoting the use of soil testing. The decrease in number of samples analyzed in 1983 was caused by the ending of a wheat promotion program requiring a soil test in order to receive the inputs for participation. Laboratory visits indicate QUIMIGAL will analyse over 6,000 samples in 1984, IUTAD over 10,000 and Rebelo da Silva has analyzed over 18,000 samples through September 30th, all this indicating expanded use of the services. Improvement in daily capacity is expressed in the following table:

Laboratory	1981	March 1983
	Samples per Day	
DREDM (Porto)	50	60
IUTAD (Vila Real)	30	70
QUIMIGAL (Sacavem)	40	40
Rebelo da Silva	100	200
DRAlg. (Tavira)	30	30
TOTALS	250	400

There are indications, through laboratory visits, of a decrease in turnaround time per sample, from time of submission to time of mailing results, from 30 days and over to a near average of 14-15 days. This has occurred through improved capacity, some new methodology acceptance, improved dryer capacity and improved handling systems. From a service and cooperative spirit change, an association of the soil testing laboratories has been started to meet annually to work continually toward improved service and interpretations of the results into lime and fertilizer recommendation. The development of new tables for lime recommendation based on desires change in pH and lime quality, and fertilizer recommendation based on interpretation of soil test level and crop yield being crop specific is a major output. This has met with some local opposition from the fertilizer industry because of difference in philosophy of soil test

interpretation. Use of available data has been used to develop the new tables and therefore does substantiate the changes. Suggestions have been made by both consultants to utilize new experimental designs to calibrate the soil test interpretation to be more soil-region and nutrient specific. There has been specific inputs from the Portuguese side to expand the use of soil testing through development of education materials (slides, booklets, etc.), training of extension people and installing farmer field demonstration.

(D) Deficiencies, Implementation Problems

This subproject has moved along quite nicely to achieve the intended goals. Great strides have been made to improve the capacity and quality of the laboratories to serve the extension service crop production programs with soil testing and valid interpretations. Presently only the laboratories at QUIMIGAL and IUTAD (Vila Real) are mailing out soil test results with lime and fertilizer recommendations. Presently interpretations are made in the field either by an extension person or a assigned technical person. Installations of the computer systems in 1985 should pull through the use of the new lime and fertilizer interpretation tables and uniform interpretations by computer to shorten the period in which the farmer will receive his fertilizer recommendations. This should free up technical and extension time in regions to bring more farmers into the program. A constraints has been in the soil sample collection process with only extension people collecting the sample for the farmers. The suggestions that training programs for farmers appears quite valid. Technical people of the cooperatives should also be brought into the program to assist in soil sample collecting as a part of sales-service program. There is a need to seriously consider on a regional bases; (1) needs for new test and their calibration, (2) calibration of test not now being used that could improve interpretation and shorten turnaround time, (3) better calibration of the present interpretation tables, (4) better understanding of subsoil fertility effect by major soil groups to fine tune interpretation, (4) a need for special test on some soils. These needs should be brought into research development subproject. There are small speciality laboratory items not now available in Portugal that should be stocked and potential supplier located between now and the end of the project.

(E) Activity in future

There is the need to bring the computers systems on stream so that soil test interpretation can be completed from a center set of interpretive equations and for storage of the data. Sorting and printing of summaries soil test data can aid in mapping of fertility level by the various areas, success of this program does not warrant high level of input, but long term institutional linkage that has developed would be advantages into the future years of soil fertility programs in Portugal and this should be posterred.

FORAGE PRODUCTION

(A) Relationship of Subproject Activities

Much of the livestock, beef and dairy cattle are raised under feedlot systems, while sheep and goats are being grazed on the more marginal lands. Approximately 75% of the corn and much of the concentrates must be imported. The major objectives of the forage production program are to: (1) improve quality and quantity of forage production to decrease dependence on imported grains; (2) increase land production capacity to increase animal production; (3) improve forage quality and distribution of production; (4) reduce production cost of the animal sector. The accomplishment of these objectives is expected to be by research on improved adaptive forages, forage production systems and the development of the forage seed industry in Portugal.

(B) Inputs

Inputs to-date have been 4 person months of consultants; two in-country short courses; two persons on study tour for 3-weeks to assess seed processing needs; a 8 week academic program and a 1-year MS forage production program completed. A 2-week visit has been completed by the PROCALFER coordinator to make final plans to order forage research and seed processing equipment. Through 1984 expenditures have been, PASA cost \$65,762, 2% of total and local cost of \$2112, less than 1% of this total. There have been no capital item purchases. There is evidence of some research underway to obtain hard production data of the forage species and some fertilizer response data as well. All cultivars of forages in Portugal are undergoing cataloging before Portugal will enter the common market.

(C) Output

Most visible output has been pasture and forage improvements through renovation, liming and fertilization. These are reported on a area bases and do not designate specie, inputs, cost and economic advantage. These results appear to come from some of demonstrated efforts through the PROCALFER extension demonstration program. There is some evidence of research in forage production

(D) Deficiencies, Implementation Problems

The linkage between the soil improvement with lime and fertilizer with increased animal production is strongly depended up having in place a strong forage research, seed production, education and demonstration program. The deficiencies in the present forage program is viewed as a constraint to link the soil improvement program with the animal production program. Corn hybrids for grain and forage have been brought in and tested through the private sectors. The use of corn hybrids as forage and silage has greatly increased supporting success in the extension-demonstration programs. Therefore, major emphases in forage must focus on the grass and legumes species. The assessment of major forage system(s) by regions should be the bases from which the forage species/cultivar adaptation and solution process should be based. Planning with regions will be necessary to assist the regions to develop this program. Forage production research, species/cultivars, mixtures, lime and fertilizer response, yield, quality and

economics must also be developed according to regional needs. A foundation seeds program that would be the bases of the seed multiplication, processing certification program needs to be carefully planned. Forage seed growing areas, if Portugal plans any degree of self-sufficiency, must be selected so they can be available when this phase of the program develops. A shortage of critical technical research man in the regions is a constraint to the development of these programs and shall be further discussed in training and future emphases. Equipment needs for regions to improve the quality of research and more timely completion must be assessed, ordered and brought into the program.

(E) Activity in future

It appears most feasible to fold the forage sub-project into a component of the research sub-product to bring this into a system to increase agricultural productivity. A major thrust will be needed during the remainder of the project to make full use of the strong gains obtained in other areas. A long term professional or a institutional contract should be sought to bring together the forage production, animal production, farm practices/systems sub-projects into regional research-extension programs by the development of the Research Agricultural Production (RAP) Teams.

EXTENSION

II - EVALUATION OF SUB-PROJECT

(a) Relation of sub-project activities to project activities

The purpose of this sub-activity is: 1) to improve the technical capacity of the agricultural regional services at the local level --extension teams and technical support staff -- to stimulate farmers to increase production and productivity through the use of improved agricultural practices, and 2) to improve the capacity of the General Directorate of Rural Extension (DGA, previously DGER) to support the agricultural regional services, specifically through the training of technical staff, through the use of improved extension methodology, and through the preparation and dissemination of information to the technical staff and farmers.

The extension service is often viewed as a ineffective organization. Estimates of staff levels varied from less than one hundred to more than eight hundred. They have been represented as a poorly trained group who can do little, to react productivity with the farmers in their area of assignment.

Contrary to te above, during the field visits the evaluation team found extension workers cooperating with PROCALFER representatives and making attempts to work with farmers, establish and maintain demonstration plots and in general operate in a productive manner. It is true that most are under trained, and do not possess the necessary depth in subject matter to successfully carry out their jobs and function adequately. They are further hampered by the slowness in which they are reimbursed for per diem costs, lack of adequate transportation vehicles or funds for pol and maintenance. On the other hand, the team saw many young, alert people trying to do a job under difficult circumstances. The team was pleased to see project commodities (overhead projectors, slide projectors and in one case video tapes and equipment) being used.

The team visited some good demonstration plots which proved that lime and fertilizer would provide lush forage growth. There was no data collection to determine if increased inputs increased net income as well as increased yields. No one had measured what the actual forage yields were. No one could had calculated the cost in relation to forage on the plot. This is a lost opportunity, and not one that could be blamed on the extension workers. They did not have adequate training to provide them with the tools and methodology to conduct meaningful demonstration and data collection.

All is not bad, even in such a situation, the farmers know that the extension service is trying and welcome them as friends in the community. This is the first step that must be taken, the establishm,ent of good working relationships in a community, befor any meaningful extension work can be carried out. Time is overdue to tool up the extension workers in the regions to provide them with the subject matter skills needd to carry out a successful extension effort.

The sub-project objectives are:

- Strengthened extension services actively reaching smaller farm families, utilizing cooperative organizations
- Extension programs linked to research results but also providing feedback regarding farmer production problems which require further research;

Sub-project activities do relate to project activities, but sufficient effort has not been made to strengthen the service either at the subject matter specialist or at the instituion building level to make a significant impact.

(b) INPUTS

It is appalling that only 2% of the 1981-1984 PASA budget has been expended on extension. On the other hand 46% of the local disbursement budget has been spent for commodities.

EXTENSION INPUTS - 1981-1984.

<u>CONSULTANTS</u> <u>PERSON MONTHS</u>	<u>COMMODITIES</u> <u>ITEM</u>	<u>TOTAL</u> <u>LOCAL</u>	<u>FUNDING</u> <u>PASA</u>	<u>% OF PROJECT COSTS</u>	
				<u>LOCAL</u>	<u>PASA</u>
8.25	Tape Recorders TV Sets Cameras Printing plant equipment Limestone spreaders Duplicators Various audio visual equipment	100,278	53,399	46	2 months

(c) OUTPUTS -

<u>Weeks of Training</u>	<u>No. of Trainees</u>	<u>Person Months</u> <u>of Training</u>	<u>Reports Prepared</u>	
			<u>English</u>	<u>Portuguese</u>
5	47	29.5	6	4

Accomplishments

It is believed that this part of the extension program is established, but is not yet self sustaining because there is not sufficient hard data is being produced from the plots - no information can be given to the farmers upon which they can make a farm management decision.

III. Recommended Project emphasis the next three years

(a) Assumptions

The focus of the program will be changed from limestone, production delivery and distribution to overall Agriculture production.

(b) Change in Sub-project

Emphasis must be placed on training extension subject matter specialists to enable them to cope with farmer/community Agricultural production needs.

(c) New Activities - The assignment of a full time Production/Extension Agronomists

Although this is the best solution the need could possibly be fill by a group of a carefully selected short term dvisors who would devote their time exclusively to upgrading extension worker skills.

(d) Major Recommendations:

- Change program to an overall Agricultural Production project
- Place major emphasis on training extension subject matter specialists at all levels as permitted by personnel, funding and other constraints
- Assignment of a Production/Extension Agronomist of programming of short term consultants to cover needed areas of expertize.

IV. Mutual Coordination, Support, and Implementation of PROCALFER activities

- With Central MAFA

This is somewhat limited due to limited research information being produced and supplied by the Central MAFA.

- With Regional MAFA Programs

The best example of this is in the soils testing program.

- With Universities and/or Private Sector

There is some coordination/support between the region extension program and the University institutes. Probably the best example being Vila Real. This is partially due to their soil test laboratory activities. Private sector cooperation is very limited with the exeption of the cooperatives.

(Training Design & Mgmt)

PROJECT SUB-ACTIVITY	IN-COUNTRY					U. S.										P/M Grand Total
	COURSES & WORKSHOPS					STUDY TOURS & COURSES					ACADEMIC					
	81	82	83	84	Total	81	82	83	84	Total	81	82	83	84	Total	
02-Limestone Prod/T/D	0	0	0	5.5	5.5	0	1	0	7	8	0	0	0	0	0	13.5
03-Soil Analysis	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	5
04 -Forage Prod.	0	0	0	14.03	14.03	1.5	0	0	0	1.5	0	0	2	12	14	29.53
05 -Extension	75.75	43.5	89.4	31.25	1044.5	3.5	19.75	0	5.25	28.5	0	12	12	12	36	1109
06-Farm Prac/S.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-Ag. Research	0	0	0	38.25	38.25	0	0	0	0	0	0	0	0	0	0	38.25
08-Agr. Credit	0	20	20	20.25	60.25	0	0	0	0	0	0	0	0	0	0	60.25
09-PES	0	0	0	37.5	37.5	0	9.5	2.5	0	12	0	0	0	0	0	49.5
10-Animal Prod.	0	0	0	0	0	2	6.5	29.5	0	38	0	0	0	0	0	38
11-Ag. Marketing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-PIMS	45	10	16.25	0	71.25	0	3	0	10.5	13.5	0	0	0	0	0	84.75
13-Training D.	0	0	0	28	28	0	0	0	0	0	0	0	0	0	0	28
TOTALS	120.75	73.5	930.25	174.78	1299.28	7	38.75	36.5	22.75	106.5	0	12	14	24	50	1455.78

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II. Evaluation of Sub-activities

Farming Practices/Systems

During the life of the project significant funds (\$331,824) have been expended to study the development of the sub-activity for farm practices and systems which was introduced into the work plan to accommodate farm level work thought not to fit logically into the other sub-activities such as research and extension. It was anticipated that some form of farm systems research would be employed to address the basic questions of what factors-farmers consider in their production and marketing decisions, how to improve the coordination of research and extension, how to provide necessary information and counselling to the farmer.

A farm system research team was invited to visit Portugal in 1981 to provide recommendations for this work. The results of that visit was a proposal to PROCALFER and extension services that a farm systems research and extension approach be incorporated within the existing Research and Extension organizations, entailing a restructuring of staff responsibilities and attitudes at all levels within both organizations.

Although many aspects of the farming systems approach have merit and a place in the overall farm production approach of PROCALFER, the very brief study and written report generated little interest on the part of PROCALFER or the Ministry.

The fact that the report was not well received and was never acted upon could have been anticipated. It was conducted with only the most perfunctory approval of PROCALFER and more importantly was conducted as an OICD study without Portuguese counterparts and without local collaboration.

It further recommended broad organizational and structural changes within the Ministry System which were outside the scope and control of PROCALFER.

Another effort was attempted with a farm budget specialist in 1982 but had no influence in the development of PROCALFER programs. Given the limited and specific scope of the consultancy, it again had little, if any, influence on PROCALFER programs.

Other resources devoted to this sub-activity in 1983 and 1984 were more from the farm level analysis which is a new effort of the Policy and Economics Studies. This work conducted by a team from the University of Arizona, involves orientation and guidance on farm level data collection for profitability analysis and analysis of survey data on farming practices, technical changes, investment and labor.

Since reports of this work are not available and they are being conducted exclusively by University of Arizona personnel without the benefit of local Portuguese counterparts, the evaluation team could not evaluate the value or effectiveness of these studies. Since they are working in some agrarian zones without having direct contact nor collaboration with the Regional Services personnel, some local resentment has developed. It appears that although this type of farm management/production economics research is justified and represents a serious gap in the overall farming system, these types of activities should be incorporated into the work of the production team and integrated at the Regional level.

Inputs

1. Funding for the sub-activity

<u>Year</u>	<u>LOCAL</u> <u>Disb.</u>	<u>PASA</u> <u>Disb.</u>	<u>TRAINING</u> <u>PIO/P</u>
1981	0	0	0
1982	0	78,400	0
1983	617	155,167*	0
1984	15,152	98,262*	0
1985(proposed)	(5,300)	(125,000)	0
<hr/>			
TOTAL	15,769	331,829	0

* Mainly spent by PES

2. Consultant Technical Assistance

<u>Year</u>	<u>Person/Months</u>
1981	0
1982	1
1983	11.5 (PES)
1984	10.0 (PES)
<hr/>	
TOTAL	22.5

3. Reports (See attached list)

LIST OF EXISTING REPORTS

SUB-ACTIVITY: E. FARM PRACTICES/SYSTEMS

UP-DATED-ON: SEPTEMBER 1984

CODE	NAME OF REPORT	PREPARED BY	DATE	VERSION	
				English	Portuguese
1	Farming Systems Research and Extension (FSR/E) Team	HILDEBRAND/ HARRIS/CLOUGH	DEC 11, 1981	X	X
2	Some Microeconomic Consideration for Northern Portugal Ag	COOKE	APR 1983	X	X

AGRICULTURE RESEARCH

(A) Relation of Sub-project Objectives

There is a major need in Portugal to develop research programs that focuses on food and fiber production based on available land resources - climate and common market commodity orientations that will increase the productivity and earning capacity of the Portuguese farmer. The strengthening of the capability of regions to identify research needs, plan the correct projects, properly conduct, collect, evaluate and interpret the data so as to be of maximum use in the regions is of primary importance. The total research need that are important to PROCALFER objectives; include soil fertility, forage adaptation, forage and feed production, pasture management and a number of areas in animal production.

(B) Inputs

Very little input has been put into the agriculture research sub-projet through 1984. Total PASA expenditure of \$4,458 and local costs of \$5,463 occurred all in 1984. No capital expenditures have been listed under agriculture research. Consultant activities of 1.25 person months were expended in 1984. From the Portuguese side, many lime x fertilizer experiments with corn grain and corn forage have been conducted during the past three years. Some research in forage response to lime is also presently underway.

(C) Outputs

Nineteen people have received 3-weeks of training on microcomputers and twenty people 6-weeks training in agriculture information. Results from the corn grain and corn-forage trials have been evaluated, written up and made available back to the regions. They served to adjust soil tests interpretations tables before moving this activity into a computerized system.

(D) Deficiencies, Problems in Implementation

Because the sub-project of agriculture research is a separate sub-project and does not fold in forage production, animal production, and farm practices/systems as the components of agriculture research, it has been very difficult to identify specific agriculture research objectives. The system of sending research protocols to the regions to be conducted and then awaiting results is the common practice. There is a need to strengthen the regional research capability with equipment, trained researchers and other support to develop the regional agricultural production technology based on regional commodity needs.

Research need identification and prioritization as a planning exercise needs to be performed in each region utilizing inputs from the regional technical, administrative and extension workers. From these research needs, whether crops, cropping systems, soil problems, animal production; specific projects (methods, budget, purpose) prepared and funded. Necessary equipment identified, and within the scope of the project purchased and placed in the regions. The training needs (M.S. and short-term) formulated and people identified and enrolled in respective degree and or short-term programs. These technical people, in addition to conducting the research to develop the technology base, can also train the technical people, develop the production technology to train the extension workers and assist the farmers.

(E) Activity in the future

This activity will need to be greatly accelerated in the future and must complete the following tasks:

- (1) Identification of priority research programs on a regional basis using inputs from the regions.
- (2) Development of regional research programs, protocols and experiments based on the high priorities.
- (3) Identify the people that qualify and are available for degree training and start the process to get them into their programs.
- (4) Develop short-term training programs and or workshops necessary to complete the activities of the research program. These at times will be in the regions and would also include outside consultants.
- (5) Develop minimum equipment requirements based on needs for each region, place orders, transport to regions and train use and maintenance of this equipment.
- (6) Assist regional research with advisement visits during the early stages to insure success of projects. This may require backup help from some of the service laboratories, etc.
- (7) Organize a annual workshop to present results, discuss problems and plans based on needs for next years program.

To cover these activities a high level of technical input will be require a full time resident research/coordinator intergraded with the need in forage productions, along with selected short-term consultants. If this does not seem a viable system, it would be best to institutionalize the activity utilizing a lead institution to develop the program and bring into the program the consultants as needed to accomplish the task. A work program should be developed if the latter systems would be accepted.

CREDIT

The importance of agriculture credit to facilitate Project objectives was recognized by both Portuguese and Americans since the initiation of the Project. A total of \$45 million dollars in PL 480 funds was made available to provide a subsidized and streamlined source of credit to farmers, cooperatives, and limestone producers to help facilitate objectives of the PROCALFER program. It was arranged for this substantial sum of money to be distributed through IFADAP - a Portuguese institution designed to coordinate credit sources for loans to farmers. The PL 480 funds were to be distributed directly from IFADAP to the borrower. These funds have amounted to 20-25 percent of agricultural loans through IFADAP over the past several years.

Four specific lines of credit were instituted in support of PROCALFER objectives. These included (a) credit for installation of agricultural limestone production facilities (b) credit to cooperatives for construction of multipurpose warehouses for fertilizer and limestone storage and distribution (c) credit to farmers for its purchase of limestone and fertilizer and (d) credit to farmers for establishing pastures, fences, purchase of animals, limestone and fertilizer spreaders, and also forage production equipment.

The procedure for farmers to get loans under lines c and d to make an application through the PROCALFER regional office who in turn sends it to the Coordinating Committee in Lisbon for approval. The CC then forwards it to IFADAP offices in Lisbon for action. According to IFADAP the loan applications are often not properly documented and they begin correspondence directly with the farmer in the region to get more information. It appears that the farmer must have a very good capital position to get a loan. Virtually no risk capital is involved. At any rate these applications often take up to a one year to process and the system has simply bogged down as far as farmer loans are concerned.

Up to now approximately 2.1 million contos have been turned over to IFADAP for the first four lines of credit outlined above and another 1.5 million is ready to be released as soon as needed. The movement of these credit lines through September 1984 is shown in Quadro I (attached) out of a total of 157 applications less than half (69) have been finalized. Of the 1.6 million contos requested 690,000 are actually being utilized. Only 3 of 12 farmer application for limestone and fertilizer loans have been approved. Most of the farmer investment loans category (d) have been made to larger farms in the south.

As previously indicated the loans to cooperatives for storage facilities (b) have been most successful. Loans for limestone purchase have simply not functioned - and only 38 farmer investment loans have been made. Information from the field indicated that farmers and regional PROCALFER representatives are highly frustrated with the farmer line of credit. It has certainly hurt PROCALFER more than it has helped - by creating false expectations. At the same time we heard several times in the regions visited that one of the greatest needs to increase agricultural development was a more efficient source of subsidized credit. Commercial rates are over 30 percent while the rates from PROCALFER are 12-15.

In small MAFA regional offices are found extension agents devoting all their time working with farmers on credit - mainly in loan applications. It is estimated by MAFA officials that only 30 percent of Portuguese apply for credit. Courses of 3 to 4 weeks were offered in 1982, 83, and 84 to approximately 20 IFADAP and extension service personnel in the regions each year to improve area. There is credit available from other sources including the SIFAP program operated by IFADAP.

PROCALFER brought a team from the U.S. Farm Credit Administration in 1982 to conduct a review of the policy organization and operation of the agricultural

credit system in Portugal. There is little evidence that anything was changed by the study. Now IFADAPhas been abolished as an official entity and the whole future of official credit sources is unknown. Arrangements have now been made through PROCALFER to bring another U.S. team in late November and December 1984 to study and try to resolve the difficult credit problems. As this involves the Ministry of Agriculture, Ministry of Finance, Bank of Portugal, Secretary of Treasury, Mutual Agricultural Credit Unions, IFADAP and private banks - the consultants have a very difficult task.

Credit is certainly one of the major problems in Portuguese agriculture and an important variable in achieving PROCALFER objectives. It does seem that good help has been provided through the PL 480 funds for limestone production and distribution. Some selective majors should be explained to get more credit to farmers through their farmer cooperatives - which seem very important among agricultural institutions. They would need considerable help in reviewing and monitoring loans but given the volume of PL 480 funds available - it would be interesting to try at least in one or two pilot regions before a major program was undertaken. It seems very doubtful that reform of the whole official credit system of the GOP can be realized through PROCALFER.

DF

GABINETE CRÉDITO DIRECTO

QUADRO I - SITUAÇÃO DO CRÉDITO PROCALFER EM 28SET84

CRÉDITOS SOLICITADOS PARA :	OP. PROPOSTAS		OP. APROVADAS		OP. RECUSADAS		OP. EM ANÁLISE		OP. CONTRATADAS		UTILIZAÇÕES JA EFECTUADAS	REEMBOL- SOS
	Nº	MONTANTE	Nº	MONTANTE	Nº	MONTANTE	Nº	MONTANTE	Nº	MONTANTE		
(a) INDÚSTRIA TRANSFORMA- DORA	4	239.753	4	192.920	-	-	-	-	2	106.920	76.850	-
(b) ARMAZÉNS E INSTALA- ÇÕES AGRÍCOLAS x a)	55	803.341	‡ 38	476.603	2	16.700	14	108.723	26	385.056	328.328	-
(c) AQUISIÇÃO DE CALCÁRIO	12	76.039	° 6	62.031	-	-	3	10.462	3	42.683	42.022	35.320
(d) INVESTIMENTO	& 86	484.667	‡ 45	325.095	3	3.265	28	92.051	38	308.196	243.170	1.172
T O T A L	157	1.603.800	93	1.056.649	5	19.965	45	211.236	69	842.855	690.370	36.492

x Aprovada 1ª fase - UCANORTE

a) Incluído montante 167.750 contos(UCANORTE)

‡ Houve uma cancelada

° Houve duas canceladas

& Houve duas desistências e quatro devoluções
ao Grupo Coord.Procalfer, para reformulação

‡ Houve duas desistências e uma cancelada

GABINETE CRÉDITO DIRECTO

PROCALFER-CRÉDITOS SOLICITADOS PARA INDÚSTRIA TRANSFORMADORA EM 28SET84

R E G I Ñ O ; R I D A T E J O D E S T E

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
QUISSELGUR, LDA	52.500	35.000	-	Em vias contratação
T O T A L	52.500	35.000		

CONTINUAÇÃO DO ANEXO I

PROCALFER-CRÉDITOS SOLICITADOS PARA INDÚSTRIA TRANSFORMADORA EM 28SET84

REGIÃO TRÁS-OS-MONTES

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
CORCOOP	72.351	60.000	34.000	Contratada 19/08/83
<i>A 4.000,00 US</i> <i>15/60.000,00</i>				
TOTAL	72.351	60.000	34.000	

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PROCALFEN-CHÉ. TOS SOLICITADOS PARA INDÚSTRIA TRANSFORMADORA EM 28SET84
R E G I S T R O ALENTEJO

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DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	ODSERVAÇÕES
AGRIPO (PROD. SÍLICA)	55.200	46.920	42.850	Contratada 02/12/82
TOTAL	55.200	46.920	42.850	

PROCALFER-CRÉDITOS SOLICITADOS PARA INDÚSTRIA TRANSFORMADORA EM 28SET84
REGIÃO ; BEIRA LITORAL

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
AGROCALCIO	59.702	51.000	-	Em vias contratação
TOTAL	59.702	51.000		

UNIVERSIDADE FEDERAL DO RIO DE JANEIRO
PROCALFER-CRÉDITOS SOLICITADOS PARA ARMAZÉNS E INSTALAÇÕES AGRÍCOLAS EM 28SET84
R E G I S T R O : ENTRE DOURO E MINHO

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
ASSOCIAÇAS UCANORTE:				
.COOP.AGRÍC.PENAFIEL	15.500	15.500	13.950	Utilizado 90%
.COOP.AGRÍC.GONDOMAR	8.500	8.500	7.650	Utilizado 90%
.COOP.AGRÍC.FELGUEIRAS	40.000	40.000	36.000	Utilizado 90%
.COOP.AGRÍC.VILA NOVA CERVEIRA	11.500	11.500	10.350	Utilizado 90%
.COOP.AGRÍC.LAVRADORES VALENÇA	4.900	4.900	4.410	Utilizado 90%
.COOP.AGRÍC.LEIT.CONC.PÓVOA VÁRZIM	15.000	15.000	13.500	Utilizado 90%
.COOP.AGRÍC.VILA DO CONDE	18.000	18.000	16.200	Utilizado 90%
.COOP.AGRÍC.ESPOSENDE	10.500	10.500	9.450	Utilizado 90%
.COOP.AGRÍC.DA MAIA	16.000	16.000	14.400	Utilizado 90%
COOP.AGRÍC.PAREDES	4.800	4.380	4.380	Contratada 24/01/84
COOP.AGRÍC.VIEIRA DO MINHO	19.200	14.489	-	Em vias contratação
COOP.AGRÍC.AROUCA	4.152	4.152	4.152	Contratada 13/07/83
UCANORTE	235.600	167.750 ^{a)}	125.812	Contratada 04/00/83
COOP.AGRÍC.LAVRADORES MONÇÃO	36.500	16.800	-	Em vias contratação
COOP.AGRÍC.BARCELOS	70.000	23.550	-	Em formalização
COOP.AGRÍC.FAMALICENSE	21.880	-	-	Análise
COOP.AGRÍC.TERRAS DE BOURO	8.000	6.510	-	Em formalização
COOP.PRODAGRÍC.CONC. AMARES "COPACA"	14.800	-	-	Análise
CAVANCOURA-COOP.AGRÍC.CONC.CAMINHA	9.414	-	-	Análise
SUB-TOTAL	564.246	377.541	260.254	

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DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
LEITECOOPE-COOP. AGRÍC. LEITEIRA DE BRAGA	16.000	-	-	Análise
TOTAL	500.246	353.991	260.254	

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 PROCALFER-CRÉDITOS SOLICITADOS PARA ARMAZÉNS E INSTALAÇÕES AGRÍCOLAS EM 28SET84
 REGIÃO: ALGARVE

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
COOPACHIQUE	5.000	5.000	5.000	Contratada 13/04/83
COOPAMEIXIAL	3.600	1.800	-----	Câncelada 25/07/84
COOP. AGRÍC. LOULÉ	10.718	2.640	-	Em vias contratação
CASTREAL-COOP. AGR. CONC. CASTRO MARIM	2.400	-	-	Análise
COOPAGUIAL-COOP. AGRÍC. CONC. ALBUFEIRA	1.285	-	-	Análise
TOTAL	23.003	9.440	5.000	

PLANO DE CREDITO DIRECTO
PROCALFER-CRÉDITOS SOLICITADOS PARA ARMAZÉNS E INSTALAÇÕES AGRÍCOLAS EM 28SET84
R E G I S T R O ; R I B A T E J O D E S T E

4

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
AGRO-LAVOS	7.700	-	-	Recusado
COOP.AGRÍC.VILA NOVA DE OURÉM	6.511	6.060	6.060	Contratada 31/03/83
COOP.AGRÍC.TORRES VEDRAS	3.200	3.200	3.200	Contratada 14/05/84
JOSÉ. ARCANJO DA SILVA	1.500	1.500	1.500	Contratada 09/10/82
NEVES & FIGUEIREDO	6.000	6.000	6.000	Contratada 13/04/83
LOURICOOP	8.000	-	-	Análise
COOP.AGRÍC.ZEZERE	3.527	-	-	Análise
AURÉLIO ELIAS RIBEIRO E OUTRO	9.000	9.000	9.000	Contratada 24/08/84
T O T A L	45.438	25.760	25.760	

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PROCALFER-CRÉDITOS SOLICITADOS PARA ARMAZÉNS E INSTALAÇÕES AGRÍCOLAS EM 28SET84
REGIÃO: TRÁS-OS-MONTES

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
COOP. AGRÍC. MIRANDELENSE	3,000	3.000	-	Em vias contratação
COOP. AGRÍC. CONC. MEDA	9,000	-	-	Recusado
COOP. AGRÍC. BOTICAS (CAPOLIB)	10,000	6.216	6,216	Contratada 27/12/83
COOP. AGRÍC. PALAÇOULO	2,450	1.600	1.600	Contratada 06/08/84
COOP. AGRÍC. VALE DO VAROSA	3,000	-	-	Análise
ADEGA COOP. VALE DA TEJA	2.006	-	-	Análise
T O T A L	29.456	10.816	7.816	

LINE - CIL. TO DIRECTO
PROCALFER-CRÉDITOS SOLICITADOS PARA ARMAZÉNS E INSTALAÇÕES AGRÍCOLAS EM 28SET84
R E G I S T R O : ALENTEJO

8

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
CAESA-COOP.AGRÍC.ESPERANÇA/ARRONCHES	9.000	4.800	4.000	Contratada 13/07/83
COOP.AGRÍC.BERINGEL	4.357	-	-	Análise
COOP.AGRÍC.BORBA, CRL	12.600	6.000	-	Em vias contratação
COOP.AGRÍC.CONC.CASTRO VERDE	6.000	4,900	-	Em vias contratação
CAMPAGRO-COOPAGRO-PEC.CAMPO MAIOR	10.350	3.024	-	Em vias contratação
COTRAPE-COOPAGRICTRANS.AGRO PÉT. DE ALANDROAL	7,554	-	-	Análise
COOP.AGRÍC.CONC.ALMODOVAR	2.500	-	-	Análise
TOTAL	61.261	18.724	4.000	

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O M N E I N E L I D C I G
 PROCALFER-CRÉDITOS SOLICITADOS PARA ARMAZÉNS E INSTALAÇÕES AGRÍCOLAS EM 28SET84
 R E G I S T R O : BEIRA LITORAL

7

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
COOP.AGRÍC.LAVRADORES AGUEDA	4,800	4,800	4,800	Contratada 14/12/83
COOP.AGRÍC.TÁVORA	12,000	11,060	11,060	Contratada 28/03/83
COOP.AGRÍC.SOURE	3,400	3,400	3,400	Contratada 07/12/83
COOP.AGRÍC.MIRENSE, SCRL	3,950	2,300	2,300	Contratada 03/10/83
COOP.AGRÍC.CONC.MONTEMOR-O-VELHO	15,000	6,500	-	Em vias contratação
COOP.AGRÍC.CONC.CASTRO D'AIRES	2,400	860	-	Em formalização
COOP.AGRÍC.CANTANHEDE	12,000	-	-	Análise
T O T A L	53.550	29.000	21.640	

G. NET. CRÉ. D. C. CTL

PROCALFER-CRÉDITOS SOLICITADOS PARA ARMAZÉNS E INSTALAÇÕES AGRÍCOLAS EM 28SET84
REGIÃO ; BEIRA INTERIOR

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
COOP. AGRÍC. SABUGAL	3.859	3.858	3.858	Contratada 28/03/83
PENAMACOP-COOP. AGRO-PEC PENAMACOR	6.528	3.264	-	Em vias contratação
TOTAL	10.387	7.122	3.858	

PROCURA-CRÉDITOS SOLICITADOS PARA AQUISIÇÃO DE CALÇARÃO EM 28SET84
R. G. T. A. O. : ENTRE DOURO E MINHO

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
UCANORTE	12,120	12.120	12.120	Reembolsado 31/03/82
UCANORTE	23,200	23,200	23.200	Reembolsado 29/06/83
COOP. AGRÍC. FAMILIENSE	3,000	-	-	Devolvido Grupo Coord.
UCANORTE	19,348	19.348	-	Em vias contratação
TOTAL	57,668	54,668	35.320	

GOV. VET. REC. D. CTC
 PROCALFER-CP CÍTOS SOLICITADOS PARA AQUISIÇÃO DE CALCÁRIO EM 28SET84
 R E G I ã O ; RIBATEJO OESTE

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
CAETANO M.M.QUEIROZ ANDRADA PINTO	295	295	-----	Cancelada 25/07/84
RAMIRO ANTO F.P.FIADEIRO	151	120	-----	Cancelada 25/07/84
TOTAL	446	415		

PROCALFER-CRÉDITOS SOLICITADOS PARA AQUISIÇÃO DE CALCÁRIO EM 28SET84
 REGIÃO: ALENTEJO

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
CARLOS FAUSTINO ROQUE DO VALE	060	760	760	Contratada 13/04/83
ANTO LUIS MARGAÇA GALANTINHO	1.148	-	-	Análise
CARLOS FAUSTINO ROQUE DO VALE	1.754	-	-	Análise
TOTAL	3.762	760	760	

COMISSÃO DE LICITAÇÃO
 PROCALFER-CRÉDITOS SOLICITADOS PARA AQUISIÇÃO DE CALÇARÃO EM 28SET84
 REGIÃO: BEIRA LITORAL

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
AGROSCOOP	4.578	4.578	4.120	Utilizado 90%
AGROSCOOP	2.025	2.025	1.822	Utilizado 90%
UNICENTRO-UNIÃO COOP.AGRIC,CENTRO	7.560	-	-	Análise
TOTAL	14.163	6.603	5.942	

PROCALFER-CP OITOS SOLICITADOS PARA INVESTIR VTO. EM 28SET84.
 R E G I ã O ; ENTRE DOURO E MINHO

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
BERNARDO JOSÉ FERREIRA REIS	2.365	1.300	1.300	Contratada 00/09/83
LUÍS LEAL DA ROCHA	7.760	2.820	2.820	Contratada 03/08/84
TOTAL	10.125	4.120	4.120	

LINE CREDIT
 PROCALFER-CREDITOS SOLICITADOS PARA INVESTIMENTO EM 28SET84
 REGIÃO: ALGARVE

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
FRANCISCO DOMINGUES E.MARTINS	9.000	-	-	Reformulado
JOSÉ AUGUSTO F.AMADO CALADO	2.454	2.450	2.450	Contratada 25/05/83
JOÃO PIRES RODRIGUES E IRMÃOS	9.000	4.880	4.880	Contratada 28/06/84
ERNESTO CRUZ COSTA	13.000	9.740	9.740	Contratada 27/09/83
JOSÉ FRANCISCO MARQUES	1.800	-(1.800)	-	Desistiu
FRANCISCO DOMINGUES E.MARTINS	4.000	4.000	-	Em vias contratação
MANUEL FRANCISCO NUNES ROQUE	4.000	-	-	Dev.G.Coord.Reform.
ADELINO DIOGO JESUS COSTA	4.250	-	-	Análise
JOSÉ AMADO	4.500	-	-	Análise
VICTOR MANUEL BARATA	3.700	-	-	Análise
TOTAL	55.704	21.070	17.070	

III PLI IED S E CI...JS ...A INVESTIMENTO em 2002/04
 R E G I A O ; RIBATEJO OESTE

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
AGRO-LAVOS	1.300			Recusado
JOSÉ ARCANJO DA SILVA	20.000	21.500	21.434	Contratada - Aprovado
NEVES E FIGUEIREDO	1.000	1.000	1.000	Contratada 13/04/03
TOMÁS PEDRO RIBEIRO CORRÊA	2.783	2.000	2.000	Contratada 18/03/03
NUNO PEREIRA ALMADA BURGUETTE	1.481	1.401	919	Liquidado antecipada
NUNO SANTOS CAÇADOR MARTINS	1.013	1.013	1.013	Contratada 14/06/03
JOSÉ MARQUES CARDOSO	7.020	7.020	7.020	Contratada 24/06/03
JOSÉ GALAMBA DE OLIVEIRA	1.400	642	642	Contratada 08/03/04
JOSÉ LUÍS SANTA BARBARA	4.175	2.845	2.845	Contratada 19/09/03
CAETANO M.M.Q.ANDRADA PINTO	498	((=498))		Cancelado 25/07/04
TEOTÔNIO MARTINHO PINTOR	2.238	1.845	1.845	Contratada 22/09/03
JOSÉ ANT ^o SILVA NEVES	418	418	418	Contratada 07/11/03
JOSÉ LUÍS CAETANO	500			Resistiu 20/09/03
HERLANDER LOPES LEITÃO	2.476	2.476	2.476	Contratada 31/12/03
JOAQUIM NUNES SANTOS	550	-	-	Análise
DOGALHOES-SOC.AGRO-PEC., LDA	30.939	26.140	26.140	Contratada 20/09/04
MANUEL ANT ^o PRAZERES	325	325	325	Contratada 22/09/03
AURÉLIO ELIAS RIBEIRO E OUTRO	27.000	27.000	8.819	Contratada 24/08/04
MANUEL LOPES SEBASTIÃO	679	679	679	Contratada 01/06/04
MIGUEL MARIA SA PAIS AMARAL	1.953	1.660	1.129	Contratada 20/09/04
SUB-TOTAL	108.549	98.852	78.712	

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PROCALFEH-CI DITOS SOLICITADOS PARA INVESTIMENTO EM 28SET84
 H E G T A O : RIBATEJO OESTE

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
CARLOS JORGE TRINÇÃO VIETRA BORGÁ	1.437	1.337	842	Contratada 31/05/84
SOC.AGRIC.CORTIÇAS FLOCOR, LDA	7.000	7.000	5.540	Contratada 13/09/84
JOAQUIM FERNANDES PEREIRA	240	240	66	Contratada 20/09/84
ANASTÁCIO BATISTA LAURET DUARTE	2.257	-	-	Devolv.G.Coord.Ref.
MANUEL ANTÓNIO	1.208	-	-	Análise
MANUEL ANTº LEBRE LOPO DE CARVALHO	4.250	-	-	Análise
T O T A L	124.941	107.429	85.260	

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PROCALFER-CRÉDITOS SOLICITADOS PARA INVESTIR VTO EM 28SET84
R E G I S T R O ; TRÁS-OS-MONTES

6

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
DINIS SANTOS EIRAS	370	-	-	Recusado
FRANCISCO JOSÉ FERREIRA MARQUES	1.696	1.330	-	Em vias contratação
ABÍLIO FERNANDO BENTO	2.580	-	-	Desistiu
ANTÓNIO NASCIMENTO FRIAS	1.359	-	-	Devolv.G.Coord.Ref.
MANUEL AUGUSTO FERREIRA	2.024	-	-	Devolv.G.Coord.Ref.
MANUEL JOAQUIM LOURENÇO CHAVES	2.057	-	-	Análise
FERNANDO NUNES FERREIRA LEAL	2.000	-	-	Análise
JAIME GOMES GONÇALVES	662	-	-	Análise
AVENTINO SMTOS SECO	2.100	-	-	Análise
AMANDIO ALBERTO SALGADO	1.045	-	-	Análise
ARMANDO HUMBERTO PIRES	9.953	-	-	Análise
AGRIPINO NETO PARRA	1.785	-	-	Análise
T O T A L	27.639	1.330		

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PROCALFEN-CRÉDITOS SOLICITADOS PARA INVESTIR ITO EM 28SET84

R E G I S T R O : ALENTEJO

6

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
ADALBERTO JOSÉ CENTENICO	1.585	-	-	Recusado
JOSÉ LUÍS TELLO RASQUILHA	55.587	40.500	40.500	Contratada 21/12/82
FUNDAÇÃO EUGÉNIO DE ALMEIDA	35.000	30.825	30.825	Contratada 21/03/83
FRANCISCO BARAHONA NÓNCIO	2.325	1.976	1.976	Contratada 28/03/83
MIGUEL MARQUES CORREIA	2.089	2.069	2.069	Contratada 10/11/83
COMPANHIA PREVIDENTE	3.184	2.710	2.710	Contratada 14/09/83
FUNDAÇÃO EUGÉNIO DE ALMEIDA	10.000	5.873	5.873	Contratada 19/09/83
M ^o MANUELA G. LOPES RENTE	2.125	2.125	2.125	Contratada 06/12/83
FREDERICO RAMIREZ GARCIA	7.000	7.000	-	Em vias contratação
LÁZARO AVELINO PEDROSA BEJA	2.350	1.897	1.103	Contratada 14/09/84
SIMÃO JOSÉ NUNES GOMES COMENDA	1.800	1.800	1.370	Contratada 24/07/84
VASCONCELOS & LYNCKE, LDA	10.000	-	-	Análise
MÁRIO NASCIMENTO PEREIRA	1.600	-	-	Análise
SERAFIM ANTROS MANINHO LOBO	7.050	-	-	Análise
JOSÉ HERCULANO LARANJEIRO	3.518	-	-	Análise
TOTAL	145.203	104.875	96.551	

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 E G I A Q : BEIRA LITORAL

7

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
FERNANDO N. MALAFAIA NOVAIS	329	-(329)	-	Desistiu
EDUARDO SEBASTIÃO VAZ DE OLIVEIRA	1.435	1.142	1.142	Contratada 20/12/02
DIONÍSIO BRÁS	1.950	1.925	1.925	Contratada 20/06/04
OÃO-AGRO SOC. AGRÍC. IMOBILIÁRIA	1.440	.720	-	Em vias contratação
VICENTE DA COSTA PINTO	850	850	-	Em vias contratação
MANUEL BICACRO CAMPOS MALO	7.121	-	-	Análise
LICINTO MENDES TEIXEIRA MOINHO	2.200	-	-	Análise
JOSÉ JESUS OLIVEIRA MARQUES	3.500	-	-	Análise
JOSÉ CARREIRO, LDA	1.700	-	-	Análise
HERDEIROS DE M ^o CONCEIÇÃO CABRAL P. AMARAL	2.500	-	-	Análise
M ^o EDITE GOMES ROQUE OLIVEIRA	1.800	-	-	Análise
T O T A L	24.825	4.637	3.067	

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REGIÃO: BEIRA INTERIOR

8

DESIGNAÇÃO PROPONENTE	MONTANTE SOLICITADO	MONTANTE APROVADO	MONTANTE UTILIZADO	OBSERVAÇÕES
SOC.COOP."SHALOM"	69,184	69,185	30,392	Contratada 04/07/83
SOC.AGRÍC.QUINTA LAMAÇAIS, LDA	2,110	1,210	1,210	Contratada 16/02/84
AGRO-PONSUL-SOC.AGRO-PEC.QTA VÂRZEA	0,755	8,240	5,500	Contratada 14/02/84
ANTÓNIO GORDO ANASTÁCIO	1,300	1,120	-	Em vias contratação
DOMINGOS FERNANDES	1,879	1,879	-	Em vias contratação
ARLINDO HENRIQUES GIL	1,479	-	-	Análise
M ^{MA} BÁRBARA ABRUNHOSA S.GODINHO	7,096	-	-	Análise
VICTOR MANUEL RODRIGUES ESTEVÃO	1,000	-	-	Análise
MAURICÍO ESTEVES MELFE	1,350	-	-	Análise
ABILIO LOPES	2,077	-	-	Análise
T O T A L	96,230	81,634	37,102	

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II SUB-PROJECT ACTIVITY: - "Project Implementation Management Systems"

A. Relationship to project objectives

This project has had as its primary objective the development and implementation of a comprehensive program of agricultural improvement "...with the purpose of further strengthening and supporting the Portuguese Institutions responsible for carrying out these programs". This "Institutional building" component is thus one of the major goals of this project.

The "Institutional building" sub-objective has been focusing upon the development of a financial management system designed to link agriculture activities with management decision-making. The particular budgeting system that was chosen could be described as either "Program Budgeting" or "Performance Budgeting". It was felt that the installation of such a system could be technically developed with the project, be used for managerial decision-making for the project, and eventually be used to influence the entire financial management/decision making mechanisms within the Ministry of Agriculture and the other parts of the Government, particularly the Ministry of Finance. The introduction of micro-computers was designed to make the technical aspects of the financial management system work more rapidly, more accurately, and with greater economy of money and effort. In summary, it was felt that the management system was critical to increasing agriculture production. Without these administrative systems working effectively, specific agriculture development activities would be hindered or stopped.

B. Inputs to this sub-project

The inputs to this sub-project have included outside consultants for system design and training of Portuguese counterparts to understand and use both the system and the procedures involved. A limited amount of U.S. short-term training was used to support this effort. Extensive programming of the work effort was developed in close conjunction with the Portuguese counterparts directly involved with this managerial system. Micro computers were introduced as part of this effort. The existence of extensive reports testify to the intensity of this effort. The total level of effort for this sub-project (1981-84) is \$14,578 or 7% of "Local" expenditures and \$420,66 or 14% of "PASA" funds.

There is some evidence that efforts (perhaps not maximally productive) were made to gain the understanding and support of the various Portuguese administrative officials within the project and within the Ministry of Agriculture and its Regional Offices who are the implementing arms of the Ministry.

c. Outputs from this sub-project.

The technical aspects of this financial management system have been largely installed with trained technical people who have been highly motivated to learn and use the system both for this project as well as for the Ministry of Agriculture. However, the installation and utilization of the micro-computers is incomplete.

The financial management system for managerial decision-making within the project has been utilized by the Portuguese leadership. With increase use, even greater confidence in the system will be generated. Therefore, the self-generation of the system and its eventual use by others is very possible.

The use of this financial management system at the Ministry of Agriculture level has been focused upon the "Planning Cabinet". While the main objective of this cabinet has been to deal with the macro-economic aspects of Portuguese agriculture, it has also taken as part of its role the installation of an effective management information system focus for budget formulation.

However, these efforts have been slowed. The causes for this slow-down have not been for the lack of adequately trained personnel or an incorrectly designed system. This effort has been hampered by larger issues which have the effect of leaving certain technical aspects of the system at least temporarily "in limbo". Until these organizational problems are resolved, the larger goal of government-wide financial management/decision-making improvement is not likely to be achieved at the moment.

III. ACTION EMPHASIS FOR NEXT THREE YEARS

A. Possible Alternatives

There appear to be three major alternatives that can be considered for the remainder of the life of this project:

1. Emphasis upon the maintenance of the current project financial management system with no major new efforts pending dissolution upon project termination.
2. Maintain and improve the basic skills/personnel/technical procedures and equipment of this management system for use in support of other potential special agricultural projects.
3. Re-invigorate the Planning Cabinet (Ministry of Agriculture) involvement in using this system as a key element in ministry-wide management improvement efforts.

B. ACTION OPTIONS FOR ACHIEVING THESE ALTERNATIVES

There are three major options/strategies that can be considered to achieve any of these alternatives:

1. Change the formal organizational structure, procedures, and relationships. This option is unrealistic given the complexities of the system and the limited time-period of the project. In any event, formal reorganizations do not achieve very much in and of themselves.
2. Facilitate the informal linkages so as to increase the flow of information, to resolve personal and organizational differences, and to assist in motivating decision-makers to achieve the major project goals. Emphasis could be placed upon various mediating actions between decision-makers who have different personal and organizational goals.

If the option/strategy of improving the informal linkages is chosen, the mediating skills of those not directly involved in major issues/problems/disputes should be utilized and stimulated. At least during a mediating phase, punitive action or the exercise of organizational power and authority should be avoided to the greatest extent possible.

3. Combination/integration of both options/strategies.

The operational situation may require a mixture of formal and informal actions. This should be considered on a case-by-case basis by those who have the primary organizational responsibilities, assisted by those who can help in identifying various alternatives and consequences.

These options do not have to be chosen in a conscious, explicit way. They can be chosen within the context of a particular situation or problem. If the need for the explicit choosing of options seems desirable, various organizational development techniques might be utilized at the individual or organizational levels.

IV. MUTUAL COORDINATION, AND IMPLEMENTATION

A. Organizational Environment for Action

The complexities of all the organizational units, individuals, and their relationships within the project, Ministry of Agriculture, Ministry of Finance, USAID, OICD, etc. defy easy or quick description or analysis. They also make the identification and utilization of specific "pressure points" extremely difficult for an outsider to the specific system. However, these "pressure points" do exist and can be utilized to constructively stimulate the system to achieve more of the project goals.

B. "Pressure Points" for Action

The selection of specific opportunities/targets for consideration and action can be done intuitively or analytically. If done analytically, actions could focus upon those elements that seem most likely to produce maximum positive results. The identification of organizations, persons, and procedures who may be critical to the stimulation of action or inaction may be useful. The formal or informal strategies could then be used. Several examples of possible "pressure points" may be useful for explanation purposes only, not necessarily as a recommendation for action:

1. Director of the project. He could be assisted to further consider possible alternative actions to achieve his organizational, professional, and personal goals. For instance, the problem of securing the release of the special project funds could be considered for specific action.

2. Planning Cabinet of the Ministry of Agriculture. This planning cabinet is critical to the maintenance, improvement and utilization of the managerial system developed by the project consideration and possible negotiation as to specific project actions that would further stimulate them to action might be desirable.

3. Regional Directors. As the Regional Directors are the persons and organizations directly involved with the implementation of all Ministry of Agriculture programs and projects, their support and direct action in the field is essential. Further attention could be given to discovering specifically what is needed by the regions to plan activities, request support, and to implement the specific action of concern to this project. Negotiation, mediation and bargaining may be required in regard to policy alternatives, personnel, budgets, procedures, etc. The managerial system developed by this project could be used as a vehicle to at least initiate this process.

Methods of rewarding greater "productivity" in the achievement of project goals could be further considered. At the organizational level, this could mean greater financial resources and flexibility if agree-upon "productive levels" are achieved. At the personal level, this could mean greater opportunities for job enlargement/responsibilities, promotion, professional development activities, recognition, etc. These organizational and personal rewards could be explicitly agreed upon or could be the result of normal administrative actions. In any event, the "message" of rewarding productivity will be recognized. If it is acted upon is an additional matter for consideration.

V. SUMMARY

There has been significant progress in the installation of a financial management system within the project. It has demonstrated its utility for decision-making as well. Despite the complexity and difficulties of the formal organization and relationships, both the financial management system and the providing of agricultural services/products have shown significant progress. However, further

progress needs to be made to at least maintain the new procedures if not to extend their usefulness. This progress may be stimulated without major alteration in the formal organization if the resources of the informal organizations (personal contact, negotiations/bargaining, intermediary action) can be brought to bear upon the problems of stimulating people and organizations to work together to achieve a generalized common objective of increased agricultural production.

The needs of the principal clients (e.g. the Portuguese project of agricultural development) should be given priority over the needs of other client groups if the project is to be successful.

POLICY AND ECONOMIC STUDIES

One of the more general goals of the Portugal Agricultural Production Program was to help the country prepare for entry into the EEC in a manner which minimizes possible negative effects for Portugal's agricultural sector. The PES studies were intended to help Portuguese agricultural policy makers improve price and subsidy policies in light of its impending entry into the EEC. For the past four years the University of Arizona and Stanford Universities have conducted extensive studies on the economic and social profitability of Portuguese grain, oilseed and livestock production systems. Initially the emphasis was on understanding subsidy systems for fertilizer, feed grains and livestock - and in relating these to exchange rates, inflation and future Common Agricultural Policy (CAP) prices. This was followed in 1982 by a study of comparative advantage and policy choices for the grain-oilseed-livestock subsector. Additional commodity systems were studied in 1983 as well as sources of capital formation in agriculture and links between investment and technical change in small-scale agriculture. A more intensive study of small farms in Northwest Portugal was made in 1984 using farm survey data. This work focused on constraints to change related to land markets and an analysis of individual agricultural systems.

- (a) While these studies do fit stated objectives of the Project, all activities were conducted outside the regular PROCALFER framework. This is a case where valuable work was done but was carried out in a way which caused conflict between U.S. and Portuguese project management. The studies have contributed to the Portuguese policy making process but institution building benefits would have enhanced by greater Portuguese participation in data collection and analysis.
- (b) There has been a large input of project resources into this sub-project activity. It has consumed 24 percent of all project resources devoted to sub-project activities over the past four years. Over 38 months of professional time has been spent in Portugal. No PROCALFER funds from Portuguese sources have been devoted to the project.
- (c) There has been a significant output from these activities. Some 23 research reports and publications have been produced. These studies have been used by Portuguese policy makers in their analyses and negotiations on entry into the EEC. The methodologies introduced have facilitated other studies conducted by Portuguese in the Planning Cabinet of the Ministry of Agriculture, Forestry and Food (MAFA).

Another important output of the PES team has been their training activities. This program has stressed collaboration with MAFA, the Center for Research in Agricultural Economics of the Gulbenkian Foundation and the Institute of Agronomy of the University of Lisbon. Two short courses were held in 1983 and two in 1984 on Portugal and the Common Agricultural Policy and Profitability Analysis. The latter included training in the use of microcomputers for the preparation and analysis of farm, marketing, and processing budgets. Over 60 participants from MAFA, other government agencies and Universities attended these courses. In addition 2 workshops have been initiated which include 8-10 of the best students from the courses offered who are doing research studies under the direction of professors from Stanford and Arizona. There has been continuing interaction over a year's period with the first workshop group planning to present their work in March 1985. Professor Avillez from the University of Lisbon has helped coordinate and direct these workshops.

The value of all this work has been substantial. Young professionals have had opportunities to improve their analytical capabilities with new

analytical tools and methodologies. Research output on important agricultural policy and development issues has been expanded. People from the regions have also participated so agricultural economics capabilities have been increased outside the capital city as well.

- (d) While the PES activities have been very useful it is unfortunate that more long term training did not take place. It seems a lost opportunity that some capable young Portuguese did not have an opportunity to pursue MS or PhD work or Stanford or Arizona as part of their participation in the PES activities. Also more Portuguese involvement in the research analysis including joint authorship of publications would have added more to Portuguese long-term capabilities.
- (e) In the future PES activities must take place within the PROCALFER framework. It will be desirable to expand the micro-economic focus of this work and integrate it into proposed PROCALFER regional research and analysis activities. While the macro policy analysis may be continued the major benefits have been gained from the work of the past four years. Emphasis should now shift to micro-economic analysis of production systems in the regions, but which integrate macro policy considerations.

II. EVALUATION OF SUB-PROJECTS

Animal Production

This five year (\$10.0 million) USAID supported Agricultural Production Program was designed to provide technical assistance, participant training and commodities to directly assist the Ministry of Agriculture and Fisheries in developing and implementing a comprehensive program to increase agricultural production and productivity, particularly in Soil Correction and Forage Production. Although little emphasis and no detail was provided in the PID and Project Paper, a total of 30 PER/MO of short-term TA for Veterinary Services were budgeted to be utilized at a rate of 6 PER/MO/Year over the five year life of the project. In the detailed outline of TA this number including extension Regional Offices and seed production, was increased to 44 PER/MO to supply short-term technical assistance in beef production (10 PER/MO), dairy production (10 PER/MO), sheep and goat production (10 PER/MO), nutrition (4 PER/MO), and animal disease (4 PER/MO).

Although in 1983, the U.S. Feed Grain Council conducted a study and presented a report on beef cattle production in Portugal and the International Executive Service Corp, working with the General Directorate for Livestock, AID and OICD, aborted an attempt to import five elite Holstein cows from the United States to be used for non-surgical embryo transplant to develop a high producing Holstein herd in Portugal, to date only a Small Ruminant Program to improve the production and productivity of sheep and goats in Portugal is being successfully implemented.

National Sheep and Goat Improvement Program

a) Development of Sheep and Goat Sub-project in relation to Project Goal, Purpose and Objectives.

Based on the stated goal in the PP "to increase agricultural production and productivity" which was expanded in the PIO/T "to increase agricultural production and productivity, leading to improved incomes for Portuguese farmers, especially the smaller producer, greater employment opportunities within the agricultural sector; and, a reduced reliance on the importation of feedstuffs and other agricultural production inputs", the program to date has been relatively unsuccessful. To date only limited production/management information has been provided directly to farmers to assist them to increase and improve their production and productivity. However, given the fact that (1) the first consulting activities were initiated in June 6-19, 1981 to advise the Ministry of Agriculture, Commerce and Fisheries on the role of sheep and goats in agricultural development in Portugal and to recommend programs to accomplish this role, (2) the implementation program was not initiated until 1983, and (3) the time frame for obtaining data on livestock is greater than that for crops, the program has been extremely successful in the development of National Sheep and Goat Improvement Program that is collecting basic production, reproduction, breed and management data that can be used by farmers to improve their production and productivity. Although several projects are being implemented to obtain the base-line data and appropriate technology required to develop sound production programs, the principal study is the "Basic Management and Breed Evaluation Program". The program has two primary and one secondary objectives.

Primary Objective

A. To develop and establish a basic management program for small ruminants in Portugal with additional practices according to product or area/environment.

B. To measure performance traits of selected genotypes of sheep and goats in regions of Portugal where they are typically produced and [to do so] under a basic, standardized management program. Performance traits to be measured include:

1. Reproduction

- fertility
- prolificacy
- fecundity
- birth weight
- peri and neo-natal survival

2. Meat Production

- survival of offspring to weaning and slaughter
- growth rate and body weight of offspring
- carcass weight, conformation score, and dressing percent
- adult body weight

3. Milk Production

- lactation curve
- yield (quantity of milk produced)
- composition (quality) of solids including proportions of fat and protein
- quality of cheese produced per quantity of milk. Information on milk will be limited to dairy genotypes

4. Wool Production

- grease fleece weight
- staple (fiber) length
- grade (fiber diameter)

Secondary Objectives

A. To select exotic breeds of sheep for use in Portugal and to initiate preliminary studies to measure the adaptability, reproduction and production performance of crosses between selected exotic and native breeds to improve specific traits.

To carry out this program, the OICD consultants developed a comprehensive "Basic Management Procedures for Sheep and Goat Production in Portugal". With the collaboration of local counterparts these management procedures are being modified and adopted for application to the varied environments and management conditions in Portugal. These procedures include details for:

1. Management of animals at breeding
2. Management of animals at shearing
3. Management of animals for parturition
4. Management during lamb growth and finishing
5. Animal breeding and genetic improvement

6. Management for lamb and kid survival
7. Selection/culling procedures and schedule
8. Facilities/equipment for handling animals .
9. Identifications and records
10. Nutrition and management control
11. Lamb feeding and finishing recommendations
12. Animal health recommendations

This program (Basic Management and Breed Evaluation Program) which involves adherence to prescribed management practices and to data collection schedules has now been initiated at nine (9) experiment stations and one (1) private sheep flock distributed throughout the country. It incorporates 1747 breeding female sheep of eleven (11) genotypes and 79 female goats of one (1) genotype. These studies represent a sample of approximately 90 percent of the sheep population in Portugal. Details of stations, breeds, numbers and years of data collection are presented in Table 1.

The distribution of these collaborating programs within the country are represented on the map which follows.

The program is now into the second year of data collection on eight (8) breeds at six (6) locations and in the first year of data collection on 6 breeds at four (4) locations. Basic data on breed reproductive performance, meat production, wool production and quality, and management procedures are being obtained at most stations. To date it has not been possible for the program to implement a protocol for milk production measurements which are required to evaluate the milk breeds. Data on milk production (yield and lactation curve and persistence is being obtained. However because of lack of laboratory equipment, supplies and trained technicians, data on milk quality (fat content, percent solids and protein content) and quality and quantity of cheese produced is not being obtained.

It should be pointed out that although the program in general has performed at a level superior to that originally anticipated, all locations are not performing at the same level. Differences and deficiencies in performance are due to limitations imposed by inadequate levels of support provided by some agencies such as the Regional Directorates and PROCALFER, overall inadequacy of some facilities, inadequacy of training of personnel at some stations and the lesser effort and dedication of team leaders at some locations. Some locations are operating under serious personnel constraints.

Review of samples of the data being obtained supports the opinion of the evaluator, that the data being collected on sheep will, if continued, provide much of the basic technology for sheep producers to increase sheep production and productivity in Portugal, especially for the sheep producers with medium to large sized flocks.

A second project that has been initiated is the "Determination of Phenomenum in Selected Genotypes of Sheep in Portugal". This work has been initiated at Venda Nova and at Aboboda. Its purpose is to establish the seasonality of sheep ovulation throughout the year in order to develop a breeding program that takes advantage of seasonal increases in ovulation while at the same time having the lambs dropped during seasons to take maximum advantage of forage production. This study is developing but is seriously logging behind other program development.

b) Inputs

1. Technical Assistance (USA)

TABLE 1

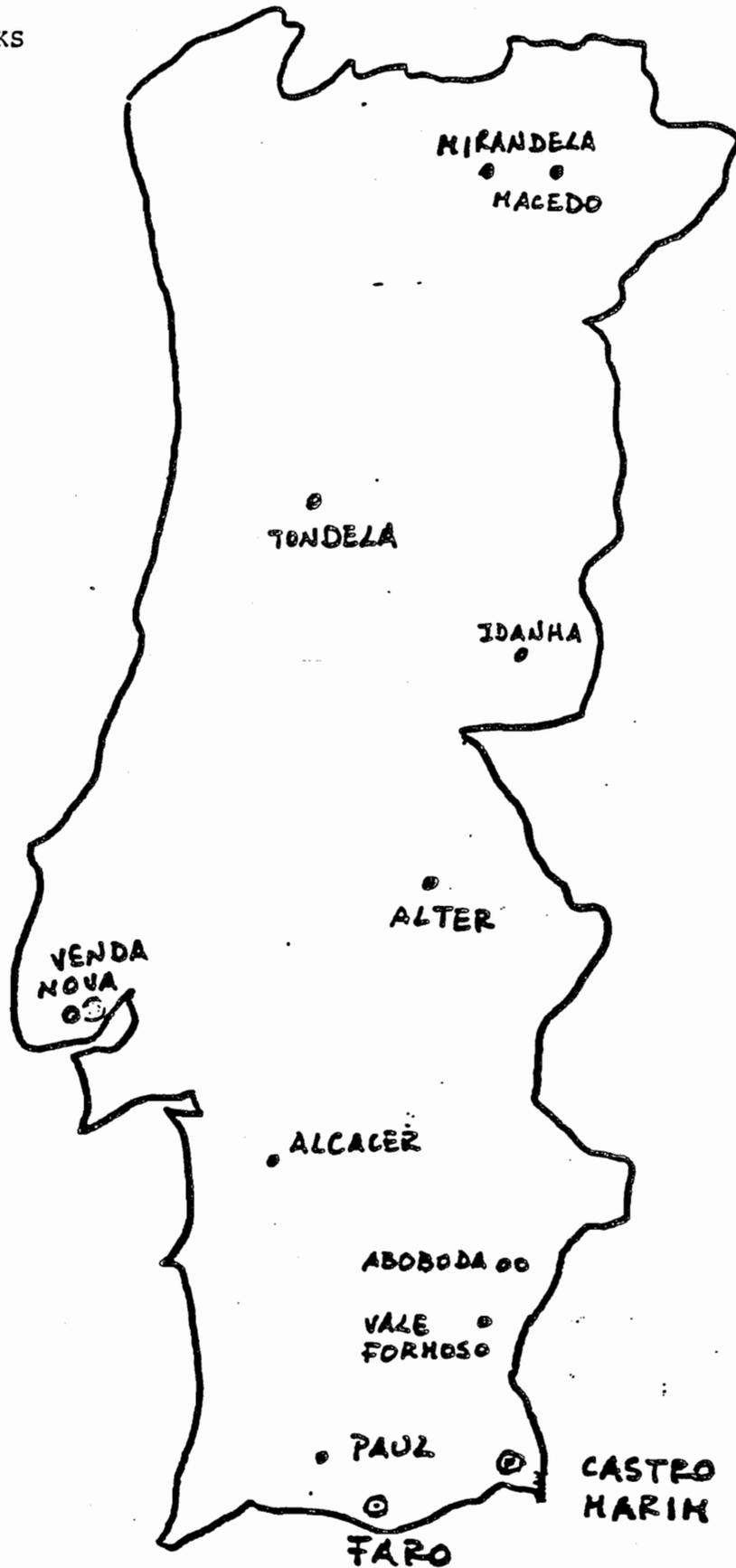
SUMMARY OF SHEEP AND GOAT PROGRAMS IN OPERATION

LOCATION	GENOTYPE	NUMBER FEMALES	YEARS IN OPERATION	
Aboboda	Merino Branco	189	2	
	Serpentina (*)	79	1	
Alcacer	Merino Branco	112	2	
Castelo Branco	Merino Beira Baixa	125	1	
	M.B.B. x S.Estrela	126	1	
Macedo	Churro Badano	150	2	
	C.B. x Mondegueiro	119	2	
	Galego	115	1	
Mirandela	C. Badano	127	1	
	Sardo x C.B.	63	1	
Paul	Campanico	232	2	
Tondela	S.Estrela (Branco)	56	2	
	S.Estrela (Preto)	48	2	
	Friserra	105	2	
Vale Formoso	Campanico	122	2	
	Precoce Alter	58	2	
TOTAL	9 Stations	12 Genotypes	1826 Females	9 (2 years) 6 (1 years)

Source: Summary by Dr. Luis da Gama.

(*) Goat Herd.

LOCATION OF FLOCKS
IN BASIC
MANAGEMENT AND
BREED EVALUATION
PROGRAM



1981

Warren Foote	Small Ruminants	06/06/81-06/19/81	1/2
Warren Foote	" "	09/15/81-11/15/81	1
John Butcher	" "	09/15/81-11/15/81	1
Jay Call	" "	09/15/81-11/15/81	1

1982

Warren Foote	Small Ruminants	07/18/82-08/01/82	} 2 3/4
Warren Foote	" "	10/12/81-10/31/81	
John Butcher	" "	10/12/81-10/31/81	
Jay Call	" "	10/12/81-10/31/81	

1983

Warren Foote	Small Ruminants	11/13/82-12/21/82	} 4
Doyle Mattheus	" "	11/13/82-12/14/82	
Carl Hausler	" "	11/13/82-12/14/82	
Carl Hausler	" "	03/17/83-04/08/83	

1984

Warren Foote	Small Ruminants	11/05/83-12/17/83	} 2
Jay Call	" "	11/05/83-11/30/83	
Fred Zimmerman	Beef Cattle Study	11/06/83-11/19/83	} 4
Antonio Reis	" " "	11/06/83-11/19/83	
Guilherme Dias	" " "	11/06/83-11/19/83	
Thad Box	" " "	11/06/83-11/19/83	
Linda Hardesty	" " "	11/06/83-11/19/83	
David Hutcheson	" " "	11/06/83-11/19/83	
David Price	" " "	11/06/83-11/19/83	
Barry Bobst	" " "	11/06/83-11/19/83	

1985

Warren Foote	Small Ruminants	10/01/84-11/03/84	} 2
Carl Hausler	" "	10/01/84-11/01/84	

2. Commodities (USA)

Received

1 Laparoscope - sn 5508
4 Model in-50 Chatillon Scale
8 Hoof Trimming Secateurs
4 Elastrators
2000 Rubber Rings for Elastrator
4 Scales (20Kg)
7 Beam Scales (200 Kg)
1 Standard Tattoo set
8 Standard Tattoo set w/ear release
8 sheep anvile sets
8 3/16" steel stamp figures sets
8 sheep clinchers

600 PSR NAT ALUM Sheep tags (Blank)
710 PSR NAT ALUM Sheep tags (Numbered)
4 ITHACO SCANOPREGS, Model 738

13 JE1473 Paint Brand Set, 2-1/2"
13 JE1474 Paint Brand Set, 4"
5 JE2383 Portable Ejaculator
15 JE2383A Battery u/w Item 03

Approved but on order

1 Laparoscope, 35 x 8mm, #880
1 Trocar sleeve, Trump Valve, #8020
1 Tyramydal Trocar, 8mm, #8012
1 Fiberglass insulated sleeve w/o Valve, #6010
1 Tyramydal Trocar, 5mm, 6012
1 Grasping Forceps, 5mm, #681
1 High Intensity Illuminator & Pump, #1185A
1 Fiber Light Cable & Adaptor, #564
1 Tactile Probe, 5mm, w/cm markings #605
1 Hose w/level lock, #569-1
1 Brush #BR4
1 Sealing Cap, red, 5mm, #2
1 Sealing Cap, red, 8mm, #4
12 Sling Scales Model IN-50
1 82PSRNL PSR Tag, natural aluminum 3, imprint on shank: MAFA , 2200 each
8 22S3/16F Steel Stamp, 3/16" figures
8 87AS Anvil #S, sheep size
9 886CPSA Perf sheep tag clincher
10 896E Elastrator
4 896ERM Rubber ring
88 C2215N Ewe Marking Harness
120 C2219N Marking Crayon, Winter Red
120 C2220N Marking Crayon, Winter Green
120 C2221N Marking Crayon, Winter Black
600 C7516N Tag, plastic, white
300 C7515N Tag, plastic, yellow
20 C7810N-62104 Paint, black
9 C7529N-61300 Applicator
16 C2154N Burdizzo Foot Rot Shear
6 C1124N-3711 Sheep Shears, English Style
21 C6180N Artificial Vagina
7 C61154N-9825 Repl Liner u/w 11
8 C5680N-2515 Tattoo Set, paint, 0-9
7 Z8189N-738 Scanopreg w/option for 50Hz-220V
13 JE1473 Paint Brand Set, 2-1/2"
13 JE1474 Paint Brand Set, 4-1/2"
5 JE2383 Portable Ejaculator
15 JE2383A Battery u/w Item 03

3. Funding from USAID Project Budget

<u>Fiscal Year</u>	<u>Local Disb.</u>	<u>PASA Oblig.</u>	<u>Training PIO/P</u>
1981	0	26200	
1982	0	10200	
1983	12429	170260	
1984	93	90978	
1985 (Projected)	(500)	(70000)	
<hr/>			
Total Expeded to Date	12522	297638	40800

4. GOP Inputs

It was not possible to obtain data on GOP Inputs, given the complexity of the budgeting system, the regional control of funds and personnel time distribution. Since the projects have functioned exclusively with GOP personnel, and only very limited funds from PROCALFER have been expended for commodities, it rapidly became obvious that this is a GOP financed project. Taken as a whole, more than 99 percent of the funding for local personnel, facilities, animals, supplies, transportation, etc. has been supplied by the GOP through the Regional Directorates. Support has been received from the DGP and DGER.

c) Outputs

1. Reports (see Table 2)

2. Video - One video on "Foot Rot" has been prepared by the program for use in training extension workers and farmers.

3. Sheep Day - One Sheep Day for 250 sheep producers, farmers and personnel from the DGP, Regional Directorate it was held at Alcacer to Sal. The purpose of this field day was to demonstrate basic management procedures being practiced at the private sheep station.

4. People Trained - US study tours - a detail of the people receiving training through study tours is shown on Table 3. Reports from the results of these study tours have been positive. The study tour to Cal Poly and the International Sheep and Goat Institute at Logan, Utah, was well received and had a significant impact on the National Sheep and Goat Program. The high quality of the training by the group is reflected in their performance within the program. Participants trained are shown on Table 3.

- Informal inservice and seminars/workshop training activities have been an integral part of the consultancy activities within this program. During each visit the consultants ... individually and collectively with those involved with the programs. This has not only seemed as an excellent training tool that has strengthened the overall group but has helped to develop a team spirit of cooperation.

TABLE 2

REPORTS

CODE	NAME OF REPORT	PREPARED BY	DATE	VERSION	
				English	Portuguese
1	Final Report and Recommendation on the Role of Sheep and Goats in Ag Development in Portugal	FOOTE	JUN 6-19 1981	X	X
2	Recommendation Basic Management Procedures for Sheep and Goat Production in Production in Portugal	FOOTE/BUTCHER CALL	OCT 23, 1981	X	X
3	A Report on Recommendation for Development of a Program to Improve Sheep and Goat Production in Portugal	FOOTE/BUTCHER CALL	OCT 1981	X	X
4	The Sheep and Goat Development for Portugal	FOOTE	AUG 1982	X	
5	The National Sheep and Goat Improvement Program for Portugal	FOOTE/MATTHEUS HAUSLER	DEC 31, 1982	X	X
6	The National Sheep and Goat Improvement Program for Portugal	HAUSLER	APR 25, 1983	X	
7	Recommendations for Increasing the Production of Beef Cattle in Portugal	U.S. FEED GRAINS COUNCIL	NOV 6-19, 1983	X	
8	The National Sheep and Goat Improvement Program for Portugal	FOOTE/CALL	DEC 16, 1983	X	
9	The National Sheep and Goat Improvement Program for Portugal	FOOTE/HAUSLER	NOV 03, 1984	X	

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TABLE 3

Summary of short courses presented by ISGI or Cal Poly and the participants.

Names of Participants	Short Courses					
	Data & Economics	Cal Poly	Reprod. & Genetics	Animal Health	Nutrition & Pastures	Extension
<u>General & Regional Direction</u>						
Luis Telo de Gama	1	1	1	-	-	-
Selene Veiga	1	1	-	1	-	-
Sales Henriques	1	1	1	-	-	-
P. Teixeira de Sá	1	1	-	-	-	1
Antônio Bettencourt	1	1	-	-	1	-
Renato Caroline	1	1	-	-	1	-
Ovidio Rodrigues	1	1	-	-	-	1
Cabral de Almeida	1	1	1	-	-	-
Marcelino Tavares	1	1	1	-	-	-
Edgar Corriera	1	1	-	1	-	-
Mafalda Monteiro	1	1	-	-	1	-
Manuela Oliveira	1	-	-	-	-	-
Isabel Bravo (translator)	1	1	-	-	-	1
<u>Universities</u>						
Jorge Azevedo (IUTAD)	-	1	1	-	-	-
José Roquete (Évora)	-	-	-	-	1	-
José Avo (Évora)	-	-	1	-	-	-
José Nunes (Évora)	-	-	1	-	-	-

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5. National Sheep and Goat Program. One of the most significant outputs of the program has been the development of a National Sheep and Goat Improvement Program that, although fractionated from the stand point of Regional control, is an institutionalized entity in its function. The naming of a National Coordinator (Dr. Luis da Gama) from the Direction of Livestock, MAFA, that operates under the auspices of the DGP has served to promote a National Program with a unified and coordinated objective that is and will continue to produce appropriate technology to support increased sheep and goat production and productivity.

d) Deficiencies and Problems and Implementation

- Informal cooperative arrangements between the DGP and the Regional Directorates leaves much to be desired. Cooperation and project implementation is based primarily on the willingness of individuals to work together and to dedicate extra time to the project than on substantial institutional arrangements. These informal arrangements and arbitrary Regional Directorate decisions has resulted in some cases in severe limitations of required resources and extended delays in receipt of funds, facilities and other needed resources. This lack of encouragement and support has decreased interest of some participants in the NSGIP and at some locations has prevented participations in the national program.

- Although every effort is being made to provide local (in-country) training as well as US study tours, the quantity and availability of technically trained personnel continues to be a very serious problem at some stations.

- Inadequate facilities, personnel, operating funds, animals and equipment at some stations continue to reduce the scope and effectiveness of the work being carried out. Funds for capital development have been difficult to obtain through the Regional Directorates and only insignificant quantities of resources have been available from PROCALFER.

e) Changes, Future Emphasis and New Activities for the Sub-project:

It is recommended that the present activities in the sheep and goat program be strengthened and reinforced during the next three (3) years. Activities within the sub-project which should receive special attention and emphasis during the next three years include:

- 1) A substantial emphasis in long-term training to adequately train a group of specialists who will be capable of providing the technical inputs to the program after the present support is terminated. These should be in areas of animal improvement/breeding and genetics, reproductive physiology, small ruminant nutrition, pasture and forage utilization/management, and production and management. The majority of these should be trained to the M.S. level, since given the time frame of the program it will be difficult except in special cases for candidates to complete a PhD by project completion. It should be emphasized that selection of these candidates should be made immediately, since they must leave for training by September, 1985, to complete their degree before project completion. Although the names and numbers of those interested and available for training cannot be presented in this evaluation report, it is known that the principal consultant (Dr. W.C. Foote) in collaboration with the program director (Dr. Luis da Gama) have collected information on personnel for training. It must be noted that personnel from the regions, from collaborating Universities, from the sheep department of EZN, DGP personnel, as well as people informally associated

with the program are being considered for advanced training. It is generally agreed that priority should be given to directly strengthening the staff of the NSGIP and to provide technical capability for future activities and programs. Investment in the long-term training of technical staff should be given priority.

- 2) In country and study tour training must also be emphasized to strengthen the program in the short-run. Emphasis should be given to increasing the technical capabilities and skills of regional personnel who are responsible for research/extension activities within their regions. These will be used to generate technology as well as subject matter specialists who can help to train local extension agents and to provide continuous backstopping for their extension activities. These will fit into the overall plan to strengthen the Regional capabilities for conducting on-farm test, field demonstration and extension activities.
- 3) PROCALFER should significantly increase the availability of funds to support the program, so that during the next three years they can realize their potential and integrate lagging programs completely into the system. Funds should be made available for development of facilities, equipment, personnel, local training, animals and extension activities.
- 4) A pasture and forage program should be developed within the NSGIP in collaboration with other PROCALFER pasture and forage programs. This work should emphasize the development of year-round pasture and forage production that minimizes the negative effects on production caused by seasonal variations in forage production. These pasture and forage systems should take into consideration the seasonal/life-cycle requirements of the sheep and goat production systems being developed.
- 5) As with many other commodities, present programs are being developed without the benefit of information on economics of production. Farm management/production economics at the micro-level should be developed within the overall NSGIP to provide analysis of economic feasibility of alternative production systems being developed. Early incorporation of farm level economic analysis will insure that alternate and improved technologies not only increase meat, milk and wool production, but also increase farmer income.

AGRICULTURAL MARKETING

The study of agricultural markets is an important area restricting development of Portuguese agriculture. With access to the EEC even more stress will be placed on the antiquated marketing system that exists in many commodities. As marketing was a subject area included in the Project Paper, the decision was made by AID and OICD to activate a study of possible research topics in 1982. Emphasis was given to products of particular relevance to the PROCALFER program. It should be stated that this work was activated without the approval or support of the Coordinating Committee.

Late in 1984 the MAFA Planning Cabinet requested two additional studies, one on cattle marketing from small farms in northern Portugal and another study of small farmer silage systems. These were conducted without CC approval. Early in 1984 a survey of transport and storage of fruits and vegetables in the Tras-os-Montes region for IBRD was approved. A total of 249,12hs been spent for these four marketing studies which represents a substantial expenditure of project funds outside the PROCALFER system.

As the Minister has requested deletion of this sub-activity from the Work Plan, there is little to be gained from pursuing this topic further at this time. When marketing problems are identified in some specific commodity programs, that will be the time to pursue the possibility of reactivating marketing work.

TRAINING DESIGN AND ADMINISTRATION - Sub-Project Evaluation

(a) Relation of activities to project objectives

Training has moved slowly throughout the life of the project. This has been due to a number of factors, probably the most important being the lack of an overall training plan. Early attempts by consultants resulted in two training plans which were not accepted as suitable in total for various reasons. However, some of the recommendations were implemented and various types of training were carried out including short term training in Portugal, U.S. training observation tours and five people are presently in the various steps of completion of M.S. programs in the U.S. Another is on a short term (8 weeks) program in preparation for a 2 Phd. thesis on maize for forage production. Two M.S. candidate are being processed and will depart for the U.S. soon.

The lack of the development of a training plan was recognized during the 1983 Evaluation. A proposal was made to have a task force composed of AID, OICD, USDA and appropriate Ministry training officials formed to determine the types of training required, the needs of the regions and to recommend a solution to the problem. The task force visited regions, conferred with regional staff members and developed lists of requested training for the regions. This work was completed in September of 1983 and their findings were given to Frank Fender OICD/USDA. He also took the Ministry of Agriculture's overall training program into consideration to be sure that PROCALFER planning was in agreement with MAFA goals. He prepared a draft PROCALFER training plan for FY84 and FY85 which was presented to the PROCALFER Coordinating Committee during October of 1983. The Committee reworked the plan, fitting in their priorities and developed their PROCALFER plan in January 1984. The major differences in the two plans was the deletion of most of the training of trainers.

Rational followed by the PROCALFER Coordinating Committee in formulating their training plan.

- Training for the sake of training should be excluded
- Courses must respond to needs
- Must be responsive to the services needing training

Committee priorities have been established in the following five general areas and a committee member has been assigned to assure coverage of these areas.

- Extension
- Fertility and research
- Forages and Pastures
- Credit
- Management and implementation

Although this is a move in the right direction, there are still some shortcomings. A training representative from the Training Division Ministry of Agriculture is assigned to handle the overall training function. Although this person is not a member of the Coordinating Committee, she does maintain collaborative efforts with the group. The training representative attends committee meetings when ever training matters are considered.

The Coordinating group gives the highest priority to training in extension recommending training for all three levels of extensionists. However, at present, all emphasis is put on demonstration plots. Although this is the main overall objective of the program (to increase forage production) the team recommends that the scope be broadened.

There is some difficulty in the selection of participants for both in country and U.S. training. The main difficulty has been represented to the team as the shortage of personnel in general. A situation which is aggravated by a freeze which has been in effect for at least three years prohibiting the filling of positions lost by attrition. This further increases the shortage of personnel in the system which was already understaffed prior to the freeze. In an effort to overcome personnel shortages PROCALFER contracted a number of employees which are funded from PL 480 funds. At present further contracting of employees is not allowed.

These contract personnel are regarded the same as regular Ministry employees and training opportunities are the. An example of this is, the case of Victor Oliveira. He has worked as the counterpart to one of the consultants (Louth) and has been on two U.S. training tours. It is anticipated that he will phase into a position in the MAFA at the close of the project.

In order to meet actual training needs it will be necessary to train some of the contract personnel and perhaps even go outside of the Ministry of Agriculture and send some M.S. and/or Phd candidates from the University Institutes or other Universities. This can be arranged if the coordinating committee is approached through proper channels and the proposed training will help meet project objectives.

The overall need for training was observed by the team during their trip to the regions. There was evidence that regional officials can and are willing to do things. Extension workers are willing to function, but are in need of research to extend and training in subject matter areas.

(b) INPUTS

A U.S. training specialist joined the OICD team in June, 1984 shortly after the appointment of the training coordinator in the Ministry Training Division. This person acts as the counterpart to the OICD/training specialist for PROCALFER training activities. At about the same time a U.S. training coordinator was assigned to OICD, Washington to devote 30% of her time to the coordination of PROCALFER training. Although it is too early to determine whether or not the U.S. resident staff training coordinator and the part time OICD/Washington training coordinator are having an effect. USAID and OICD/Lisbon believe that they will provide substantial contribution to the training effort.

(b) INPUTS 1981 - 1984

Consultant Person Months 1981 - 84	Budget Local Expenditures	% of Project Costs - Local	Amount of PASA Costs	% of Project Costs for PASA
16.25	\$ 21,175	10%	487,612	16%

(c) OUTPUTS 1981 - 1984

Total Person Months of Training	Reports Prepared	
	English	Portuguese
1,455.78	8	3

(complete details in Annex I)

See Annex I for breakout table showing Person Months of Training by category.

II - Recommended Project Emphasis the next three years.

(a) Assumptions

- The focus of the project will be changed from Limestone Production, delivery and application to overall agricultural Production.

- Training emphasis will have to be concentrated in the areas of:

Production Agronomy
Soil Fertility
Animal Husbandory
Agriculture Economics

- Strong emphasis will be put on training subject matter specialists (commodity approach) and not on the training of trainers. A Cadre of subject matter specialists trained at the highest level possible given PROCALFER/Project constraints.

To train these specialists to the optimum level would be to send them to the U.S. to complete Master's degree training. However, in reality the possibility of training a total of twenty eight people (total requirement for seven regions) at this level by 1987 is unrealistic. A realistic approach will be to try and send out these that can be made available for long term training - probably not more than five or six, based on previous project experience. (five have been sent out during the duration of the project to date).

The balance of the training will have to be in country training programs of various types including on the job conducted by both Foreign consultants and by the Portuguese themselves. The heaviest contribution by Foreign consultants should be prior to the last year of the project. This would provide for the phasing out period in preparation for when the Portuguese would be handling the program completely on their own after the completion of the project. Study and observation tours would also account for part of the informal training activity needed.

(b) Increase, decrease, or change in form of subproject.

- The form of the training Design element must change from the Formal Training Design, implementation of and evaluation of training. Which has stressed institution building and the domination of the program from the Central Training Division.

- The training of subject matter specialists based on regional needs to support the thrust of the Project must be the top priority.

- Immediate steps must be taken to develop the 85, 86 and 87 plans to fit regional needs. The OICD Training Advisor and her counterpart will need to work closely with the regions to develop courses, training programs for individuals, Program training and in general make the Training program/plan move. It is anticipated that the MAFA Training Division will prepare courses offering for the coming fiscal year each September based on the PROCALFER training plan. This schedule offering will be taken to each region for discussion, regional input and scheduling.

(c) New Activities

None recommended.

(d) Summary of Major recommendations:

- Concentrate on the training of subject matter specialists in needed areas of

specialization at all levels of training within existing constraints.

- Shift training emphasis from Central Division to regions.
- Push for completion and acceptance of FY 85, 86 and 87 Training Plans.
- Evaluate role of OICD/Training Advisor during APRIL 1985 to determine if this position is to be extended and, if it is decided to be extended, determine the length of the extension.
- OICD should develop a system of accounting which shows training costs separately from total PASA expenditures. This was prepared for the team when requested for 1984. (see Annex II).

IV - Mutual Coordination, support, and implementation of PROCALFER activities.

Central MAFA

The Procalfer Coordinating group has been charged with the coordinating roll for the Central MAFA. The Training Division of the MAFA falls within the Office of Extension. Since this is the case training does not have a member on the Coordinating Committee, but is represented by the Extension Member. The Training Coordinator of the Training Division only attends committee meetings when items of Training interest are to be presented, but does not have a vote. In addition there seems to be the lack of regular communications between the Training Division and the Extension Coordinating Group member. The Training Division stresses institution building by emphasizing the training of trainers, policy which has not been implemented to any large degree. Training policy has not been developed to the level that was originally expected.

At the regional level there has been limited interface with the Training Division. This has resulted in courses being held for less than the maximum number of participants and in some cases participants have not had the background required.

Regional MAFA programs. Given the Autonomy of the regions little has happened in the way of Training Division desires to establish policy which would be adhered to by the Regions. The formal Training Design sub-activity of the Project has just not materialized. The attempts to develop a country wide training plan did not come to fruition until the Task Force went to the regions and asked for their perceived training needs.

Universities and/or Private Sector.

There is little in the way of coordination between Universities and the project on a regular formalized basis. There has been and is some coordination between Procalfer, the University Institutes, the University of Lisbon and the Gulbenkian Institute. In addition the Private Sector does contract the University Institutes to carry out research projects from time to time. Although this does not really reflect close coordination of these entities it does indicate some linkages.

Training Design

V - Backstopping, Staffing and management roles in Project.

Field Staff:

The OICD field training staff in Portugal presently consists of an OICD Training Officer assisted by a local training assistant. The OICD training Officer is newly appointed, but the local training assistant has been on board since early in the Project. However, until 1983, she also had other duties. This field

staff interfaces with OICD/Washington and the USDA Office of International Training regarding U.S. training actions. OICD/Washington has recently appointed a Washington based training coordinator who is partially funded from the project and is responsible for providing necessary backstopping activities for the project training activities and the USDA Office of International training. Training institutions or other entities as needed and AID/Washington.

AID/Lisbon

The AID representative signs all PIO/P's for project training and on occasion submits recommended actions for training to the coordinating group for consideration as the need arises. There is also a local Full Time Local National Training Officer who assists the representative and carries out training Officer Functions for other AID projects.

AID/Washington

The AID/Washington Portugal Agricultural (this is one of five countries which this office backstops) Backstop Officer performs a coordinating role between the various management segments of the project, provides a member for project evaluation exercises and conducts Project review and Near East Advisory Committee meetings as the need arises. The PASA is an AID/Washington Contract and AID/Washington does have oversight responsibilities of the project. The AID/Portugal Mission does not have an Agricultural Development Officer (ADO) and the ADO Functions are provided by the AID/Washington backstop Officer as needed.

PARTICIPANT TRAINING LIST 1981-84
(Training Design & Mgmt)

PROJECT SUB-ACTIVITY	IN-COUNTRY					U. S.										
	COURSES & WORKSHOPS					STUDY TOURS & COURSES					ACADEMIC					P/M
	81	82	83	84	Total	81	82	83	84	Total	81	82	83	84	Total	Grand Total
02-Limestone Prod/T/D	0	0	0	5.5	5.5	0	1	0	7	8	0	0	0	0	0	13.5
03-Soil Analysis	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	5
04 -Forage Prod.	0	0	0	14.03	14.03	1.5	0	0	0	1.5	0	0	2	12	14	29.53
05 -Extension	75.75	43.5	894	31.25	1044.5	3.5	19.75	0	5.25	28.5	0	12	12	12	36	1109
06-Farm Prac/S.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07-Ag. Research	0	0	0	38.25	38.25	0	0	0	0	0	0	0	0	0	0	38.25
08-Agr. Credit	0	20	20	20.25	60.25	0	0	0	0	0	0	0	0	0	0	60.25
09-PES	0	0	0	37.5	37.5	0	9.5	2.5	0	12	0	0	0	0	0	49.5
10-Animal Prod.	0	0	0	0	0	2	6.5	29.5	0	38	0	0	0	0	0	38
11-Ag. Marketing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12-PIMS	45	10	16.25	0	71.25	0	3	0	10.5	13.5	0	0	0	0	0	84.75
13-Training D.	0	0	0	28	28	0	0	0	0	0	0	0	0	0	0	28
TOTALS	120.75	73.5	930.25	174.75	2000.25	7	38.75	32.5	22.75	106.5	0	12	14	24	50	1455.75

Annex I

	OBLIGAT.	TOTAL TA	TOTAL TR	TOTAL COM
01 PROJ.MGMT.ADMIN & DESIGN				
1. TECHNICAL ASSIST.	196752	196752		
2. TRAINING	0		0	
3. COMMODITIES	12514			12514
SUB-TOTAL	209266			
02 LIMESTONE PROD./T/D				
1. TECHNICAL ASSIST.	59852	59852		
2. TRAINING	1075		1075	
3. COMMODITIES	7025			7025
SUB-TOTAL	67952			
03 SOIL ANALYSIS				
1. TECHNICAL ASSIST.	14013	14013		
2. TRAINING	93		93	
3. COMMODITIES	924			924
SUB-TOTAL	15030			
04 FORAGE PRODUCTION				
1. TECHNICAL ASSIST.	18148	18148		
2. TRAINING	0		0	
3. COMMODITIES	23526			23526
SUB-TOTAL	41674			
05 EXTENSION				
1. TECHNICAL ASSIST.	0	0		
2. TRAINING	31378		31378	
3. COMMODITIES	4078			4078
SUB-TOTAL	35456			
06 FARM PRACTICE/SYSTEMS				
1. TECHNICAL ASSIST.	0	0		
2. TRAINING	0		0	
3. COMMODITIES	0			0
SUB-TOTAL	0			
07 AGRICULTURAL RESEARCH				
1. TECHNICAL ASSIST.	0	0		
2. TRAINING	4110		4110	
3. COMMODITIES	348			348
SUB-TOTAL	4458			

08	AGRICULTURAL CREDIT				
	1. TECHNICAL ASSIST.	0	0		
	2. TRAINING	0		0	
	3. COMMODITIES	0			0
	SUB-TOTAL	0			
09	POLICY & ECON.STUDIES				
	1. TECHNICAL ASSIST.	417047	417047		
	2. TRAINING	26918		26918	
	3. COMMODITIES	27432			27432
	SUB-TOTAL	471397			
10	ANIMAL PRODUCTION				
	1. TECHNICAL ASSIST.	32305	32305		
	2. TRAINING	0		0	
	3. COMMODITIES	61223			61223
	SUB-TOTAL	93528			
11	AGRICULTURAL MARKETING				
	1. TECHNICAL ASSIST.	63075	63075		
	2. TRAINING	0		0	
	3. COMMODITIES	0			0
	SUB-TOTAL	63075			
12	PIMS				
	1. TECHNICAL ASSIST.	5247	5247		
	2. TRAINING	4762		4762	
	3. COMMODITIES	0			0
	SUB-TOTAL	10009			
13	TRAINING DESIGN				
	1. TECHNICAL ASSIST.	117068	117068		
	2. TRAINING	60237		60237	
	3. COMMODITIES	0			0
	SUB-TOTAL	177305			
	UNCLASSIFIED	477			

TOTAL	1189150	923507	128573	137070
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GRAND TOTAL:*****	1189627
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PROG.NAME: PASACAT
 UPDATED: 11/14/84

1a Parte: BREVES CONSIDERAÇÕES SOBRE O PROGRAMA PROCALFER

I. Introdução

1. O Programa PROCALFER foi iniciado em 1980.

Sumariamente o Programa pretendia alcançar os seguintes objectivos :

- i - Aumentar a produtividade e a produção agrícola.
- ii - Melhorar as condições estruturais ao nível da produção agrícola, de forma a minimizar os impactos negativos que a agricultura portuguesa irá suportar perante a adesão à Comunidade Económica Europeia (CEE).

2. A apreciação sumária das condições de produção que caracterizam a agricultura portuguesa permite concluir que os baixos níveis de produtividade da maior parte das actividades produtivas e os reduzidos valores globais da produção agrícola e pecuária obtidos, resultam fundamentalmente do desajustamento entre os sistemas culturais praticados e as características ecológicas das diversas regiões e da prática sistemática de tecnologias de produção e de itinerários técnicos igualmente pouco ajustados às exigências das culturas e as características do meio.

Um dos factores mais importantes do estrangulamento do processo produtivo é a fertilidade do solo.

Este factor restritivo do aumento da produção é no entanto, na generalidade dos casos, susceptível de ser neutralizado e de num horizonte de curto-médio prazo, permitir alcançar respostas na produtividade das culturas e no valor global das produções, muito significativas.

3. O conhecimento destas circunstâncias esteve na origem da fixação dos objectivos do Programa PROCALFER, e na implementação da sua orientação. PROCALFER foi programado para ser desenvolvido entre 1980 e 1985; os fundos necessários ao seu funcionamento tem três origens:

- i - O recurso a verbas geradas pela PL 480:\$45,000,000
- ii - Fundos concedidos pelos USA:\$10,000,000
- iii - Fundos concedidos pelo GOP:\$10,000,000

O total de fundos envolvidos pelo programa é de \$65,000,000.

II. As metas e objectivos do PROCALFER

1. O Programa PROCALFER fixou para a sua acção as seguintes metas:

i - Contribuir para uma progressiva correcção da acidez dos solos através da aplicação de correctivos calcáreos. Os solos ocorrentes em Portugal, nomeadamente nas regiões do norte e de forma menos acentuada no sul, apresentam elevada acidez, situação que limita ou constitui mesmo importante restrição ao aumento da

produtividade da generalidade das culturas.

ii - Melhorar a fertilidade dos solos agrícolas, muitas vezes submetidos a sistemas culturais muito desequilibrados e pouco racionais, através da aplicação de níveis racionais de adubos e correctivos, estabelecidos de forma a assegurar o aprovisionamento dos solos nos nutrientes retirados pelas culturas e arrastados pelas águas das chuvas.

iii - Contribuir de forma significativa e continuada para a recuperação e manutenção da fertilidade do solo através de uma mais correcta afectação dos sistemas culturais.

iv - Melhorar o conhecimento das técnicas de correcção e fertilização dos solos, através da investigação e experimentação conduzidas de forma a ter em conta as particularidades pedoclimáticas de cada região, e a constituírem suporte informativo para a resolução dos problemas da fertilidade do solo a nível regional.

v - Desenvolver estruturas de produção de calcáreo de forma a permitir satisfazer a procura acrescida a que a correcção dos solos através da incorporação de correctivos calcáreos, necessariamente irá dar origem.

vi - Melhorar e desenvolver as estruturas de armazenagem destinadas ao calcáreo e aos factores de produção cujo consumo será acrescido através do Programa.

vii - Levar junto dos agricultores a mensagem da intensificação cultural, a conseguir através da alteração dos sistemas culturais e do aumento da fertilidade dos solos.

viii - Desenvolver estímulos económicos que permitam aos agricultores aceitar a mensagem da transformação dos respectivos sistemas culturais.

2. Para alcançar estas metas foi o Programa organizado de forma a actuar nos seguintes níveis:

2.1 A montante da produção ao nível dos serviços do MAFA, através das seguintes actuações:

i - Organização dos Serviços preparando-os e dotando-os de meios, para transmitirem a mensagem inerente ao PROCALFER. Esta actuação tem em vista a transmissão de uma nova dinâmica visando basicamente a investigação aplicada, à formação de técnicos e extensão rural. Para responder às exigências do Programa, torna-se necessário dotar os serviços de meios de intervenção ao nível dos conhecimentos da fertilidade do solo e respectiva correcção (análise/conselho), da resposta das diversas culturas à fertilização (ensaio/experimentação), da capacidade de transmissão dos conhecimentos adquiridos aos agricultores utilizadores (formação dos técnicos/demonstração/extensão rural).

Todas estas intervenções devem beneficiar o conjunto dos componentes do PROCALFER. O output final visado pelo PROCALFER e o acréscimo significativo e continuado da produtividade e da produção da agricultura, a conseguir no âmbito dos sistemas culturais mais racionais.

A correcção do solo e o aumento da sua fertilidade não constituem o objectivo final; constituem um meio para, servindo de suporte a sistemas culturais mais equilibrados, alcançar o visado aumento da produção.

Isto significa que para além da investigação, formação, demonstração e extensão, nos domínios da fertilidade e correcção do solo, o programa prevê o desenvolvimento de acções que devem conduzir ao estudo dos sistemas culturais mais ajustados às diversas condições ecológicas do território, ao estudo e análise do comportamento das diversas culturas e cultivares, ao estudo das operações culturais, ao estudo da adaptação e resultados produtivos das actividades pecuárias, ao manejo dos animais, etc.

Estas acções devem ser implementadas, sem o que se corre o risco de transformar o PROCALFER numa acção exclusiva de "correccção e melhoria da fertilidade do solo", sem articulação com o sistema de utilização daquela fertilidade, e por consequência numa acção do tipo "campanha" cujos feitos são, por via de regra, mais nefastos que positivos, e de qualquer forma de resultados sempre parciais e efémeros.

2.2 A montante da produção através do fomento de estruturas de produção de calcáreo de modo a permitir fazer face a uma procura que através da implementação do programa sera substancialmente aumentada.

Constituição de uma rede de armazéns, racionalmente distribuídos e localizados, de forma a assegurar o racional aprovisionamento em correctivos e adubos.

Esta intervenção é estimulada através da concessão de subsídios e da existência de linhas de crédito especiais para financiamentos nestes sectores.

2.3 Ao nível da produção, envolvendo as explorações agrícolas individuais, de grupo, ou cooperativas o PROCALFER actua procurando concretizar as seguintes acções:

i - Correccção do solo e melhoria da fertilidade conduzida através do conselho técnico resultante da respectiva análise.

Esta acção é estimulada através de dois tipos de intervenção. Por um lado o conselho técnico e a acção demonstrativa levada a cabo pelos serviços de extensão rural. Por outro lado possibilitando o recurso a linhas de crédito para aquisição de calcário e fertilizantes.

ii - Alteração dos sistemas culturais, actuando portanto de forma integrada sobre o conjunto da exploração. Esta intervenção é estimulada através da existência de uma linha de crédito altamente bonificada, permitindo o financiamento de um vasto conjunto de intervenções no sistema de culturas e no aparelho de produção das explorações.

2a. Parte: AS VISITAS ÀS REGIÕES AGRÍCOLAS

I -Propósito das visitas

1. Com vista a recolher informações que permitam proceder a avaliação do Programa PROCALFER a "Missão de Avaliação" constituída para levar a efeito este objectivo, procurou contactar com os diversos intervenientes a nível central e regional e com os utilizadores do Programa (agricultores, cooperativas, etc.)

2. Deve referir-se que a implementação do PROCALFER tem sido conduzida ao longo destes primeiros 3-4 anos de funcionamento, privilegiando significativamente as acções a montante do processo produtivo, isto é do agricultor.

As acções desenvolvidas tem fundamentalmente visado as seguintes componentes do Programa:

i - Organização dos serviços de apoio à extensão, principalmente no que concerne a organização e o equipamento dos serviços de colheita de amostras e de análises de terras

ii - Organização e estruturação dos serviços de experimentação nomeadamente através de instalação de campos de experimentação no domínio da correccção e fertilidade do solo, e no estudo do comportamento de variedades e culturas cerealíferas e forrageiras.

iii - Formação de quadros extensionistas

iv - Organização dos serviços de extensão rural a nível regional , nomeadamente através do fornecimento de equipamento de apoio.

v - Concessão de financiamentos e subsídios para a construção de unidades de produção de calcareo e de estruturas de armazenamento .

Esta acção tem sido levada a cabo através de linhas de crédito especiais, utilizando fundos da PL 480.

Pode portanto concluir-se que a implementação do Programa tem durante os primeiros anos visado essencialmente acções preparatórias do acréscimo da produção e produtividade.

3. O reduzido prazo de tempo decorrido desde o início do PROCALFER e o tipo de intervenções até agora desenvolvidas, não permitem avaliar de forma quantificada os efeitos do Programa sobre a produtividades e a produção do sector agrícola.

Deste modo torna-se difícil estabelecer relações benefícios/custos (ou output/input) que permitam avaliar em termos económicos os efeitos do PROCALFER.

A orientação seguida na avaliação visou assim uma análise mais do tipo qualitativo, considerando os seguintes aspectos:

- . objectivos propostos e realizados
- . estrangulamentos existentes
- . principais resultados obtidos

4. Com vista a analisar a evolução do PROCALFER a "Missão de Avaliação" percorreu e teve reuniões nas três regiões em que o Programa mais se tem desenvolvido.

Foram visitadas as regiões de Tràs-os-Montes , Entre Douro e Minho e Beira Litoral , nas quais através de entrevistas com responsáveis dos serviços, visitas de campo, contactos e entrevistas com agricultores, a Missão procurou recolher os elementos necessários à avaliação do Programa.

A informação transmitida, ainda que valiosa, revelou-se diversa, em cada uma das regiões, o que corresponde a sistemas diferentemente elaborados de organização dos serviços regionais e a forma como foi preparada a visita da Missão por parte dos respectivos Coordenadores Regionais.

Embora visando os mesmos problemas tipo, a análise de avaliação será sistematizada por região.

II - Análise/Avaliação do PROCALFER nas regiões

II.1 - Região de Tràs-os-Montes

1. Caracterização sumária da região

A região de Tràs-os-Montes tem uma area global de 1154000 hectares.

É uma região constituída pelos altos relevos do Sistema Galaico-Duriense, entrecortada por vales fundos e dominada por imponentes planaltos. Ecologicamente polimorfa, nela se podem distinguir cenários de paisagem agrária bem delimitadas pelas suas características pedo-climáticas e pelos sistemas agrícolas que originam.

A Missão visitou duas zonas de características diferentes: Vila Pouca de Aguiar. englobada na Zona dos Vales do Sub-montanos, em que existem bons solos depressionários nos vales, e solos litólicos delgados ou esqueléticos nas encostas. Nesta zona o sistema agrícola tradicional e pouco intensivo, embora se reconheça que sobretudo nos vales com possibilidades de regadio, existam boas potencialidades para aumentar a produção; no entanto as técnicas culturais praticadas (fertilização e utilização de sementes de qualidade) e a estrutura

fundiária, condicionam o integral aproveitamento das potencialidades e limitam as produtividades e produções obtidas. Foi também visitada uma zona de Altitude no concelho de Boticas, constituída por solos litólicos de xistos delgados ou esqueléticos de vocação fundamentalmente florestal e silvo-pastoril; nesta zona existem numerosos baldios sub-utilizados com boas potencialidades para a implantação de pastagens para ovinos e caprinos.

2. A organização dos serviços

Os serviços encontram-se organizados em 9 zonas agrárias, dispendo actualmente de 68 extensionistas.

Verificou-se que existe um correcto planeamento e uma boa organização nos contactos com os agricultores com visitas efectuadas quinzenalmente.

O programa na região é coordenado por um "Coordenador Regional" dinâmico, mas que não dispõe de delegação de competências que lhe permita utilizar eficazmente os meios que teoricamente são postos à sua disposição, sem perda de tempo em sucessivos entraves burocráticos e pedidos de autorização que o desviam da acção principal de apoio técnico e acompanhamento das acções do programa.

A equipa de extensão rural, parece pouco numerosa face à diversidade de acções em curso na região, ao nível técnico e cultural dos agricultores, ao atraso tecnológico e produtivo da agricultura e à dimensão e condições topográficas da região.

Encontra-se no entanto bem organizada e muito integrada com os objectivos do PROCALFER.

A ausência de especialistas pode ser ultrapassada através de um contacto mais estreito com o corpo técnico do IUTAD.

3. Visitas efectuadas na região de Trás-os-Montes

A Missão contactou com campos de demonstração nas duas zonas da região visitadas. Teve ainda ocasião de visitar uma Cooperativa de agricultores na região de Boticas a "Capolib", uma cooperativa de produção de calcáreo no Marão e de reunir com o Reitor da Universidade de Trás-os-Montes e com o seu grupo técnico de apoio.

3.1 Visitas a campos de demonstração.

Na zona de Vila Pouca de Aguiar (Vales Sub-Montanos) foram visitados campos de demonstração de pastagens de altitude, instalados com a colaboração de agricultores e acompanhados pelos serviços de extensão rural do MAFA e por técnicos dos serviços florestais, nos quais se pretende estudar o comportamento de cultivares de gramíneas e leguminosas em zonas de altitude e a sua resposta à fertilização.

Ainda nesta zona foram visitados campos de demonstração de comportamento do milho grão à fertilização e correcção do solo e um campo de demonstração do efeito da fertilização em prados de gramíneas e leguminosas.

Todos estes campos são tecnicamente orientados pelos serviços de extensão e custeados pelo PROCALFER.

3.2 Visita à Cooperativa Agrícola de Boticas "Capolib".

Esta Cooperativa tem neste momento 2000 aderentes e construiu parte dos seus armazéns com recurso a linhas de crédito do PROCALFER.

O papel da cooperativa no aumento do consumo de correctivos e fertilizantes é evidenciado através do quadro junto.

Verifica-se que o consumo de calcáreo e de fertilizantes cresceu de 1980 para 1982, sendo este crescimento muito elevado para o calcáreo; no entanto em 1983 todo o consumo de fertilizantes registou uma contracção significativa, o que traduz uma deficiente penetração da mensagem do PROCALFER nesta zona.

A Capolib tem uma estrutura de apoio administrativo que se considera insuficiente perante os montantes dos valores actualmente envolvidos (financiamento, serviço

"CAPOLIB"

Quantidades - Toneladas
Valores - Contos

MAPA DE ADUBOS E CORRECTIVOS VENDIDOS
Anos de 1980 a 1983

DESIGNAÇÃO	1980		1981		1982		1983	
	Quant.	Valores	Quant.	Valores	Quant.	Valores	Quant.	Valores
<u>A Z O T A D O S</u>								
Nitrolusal 20,5%	466	1.660	464	2.041	449	2.920	400	3.812
Nitrolusal 26%	3	11	-	-	-	-	-	-
Sulfato de Amónio	39	129	33	138	33	197	22	207
<u>F O S F A T A D O S</u>								
Superfosfato 18%	434	1.199	424	1.487	424	2.207	386	2.891
<u>P O T Á S S I C O S</u>								
Cloreto de Potássio	49	219	43	259	33	278	26	325
Sulfato de Potássio	-	-	-	-	-	-	3	50
<u>C O M P O S T O S</u>								
Forkamónio 111	19	82	22	119	21	168	14	163
Foskamónio 122	162	777	161	969	183	1.621	167	2.154
Foskapa 022	-	-	-	-	17	165	3	67
<u>C O R R E C T I V O S</u>								
Caloário	4	7	10	17	129	203	41	62

de dívida, volume anual de vendas); o valor de vendas da cooperativa atingiu em 1983, 39 milhões de escudos, enquanto que em 1980 não ultrapassava 10 milhões de escudos.

3.3 Visita à Cooperativa de calcáreo do Marao.

Esta cooperativa encontra-se integrada na Corcoop. Dispõe de duas pedreiras de calcáreo dolomítico e calcítico localizadas na serra do Marão e para cuja exploração foram investidas cerca de 80 milhões de escudos.

A pedreira principal está situada a cerca de 6 km do moinho e local de ensaque do calcáreo. O financiamento para a construção e exploração das pedreiras foi obtido através do crédito PROCALFER, encontrando-se as obras de instalação em fase bastante atrasada.

Ainda que se reconheça a escassez de fontes de calcáreo na região parece que a localização de uma unidade de produção em zona de acessos extremamente difíceis, tanto entre as pedreiras e o local de moenda, como em relação aos agricultores, irá inviabilizar economicamente o empreendimento.

Não se dispõe de elementos que permitam saber se se procedeu a estudos alternativos que tivessem tido em conta a minimização dos custos de extracção, moenda e transporte de calcáreo. Embora o financiamento tenha sido concretizado considera-se que seria interessante proceder a estes estudos.

3.4 Visita e Reunião no IUTAD

O IUTAD desenvolve a sua acção de ensino-investigação procurando dar respostas aos problemas da comunidade rural e do desenvolvimento regional. Mantém excelente colaboração com a Comissão de Coordenação da Região Norte, com o PDRITM e com o PROCALFER.

Em relação ao PROCALFER o IUTAD tem apoiado o serviço de análise de terras e a acção de conselho de fertilização, realizando a totalidade das análises solicitadas pelos serviços de extensão rural e pelos agricultores.

O IUTAD dispõe de bons laboratórios para análise de solos, diagnóstico e controlo pecuário e estudos de nutrição animal.

Possui um excelente corpo de investigação, disposto a colaborar nos temas que condicionam o desenvolvimento regional e que poderia dar contributo muito valioso no apoio aos serviços de extensão rural do MAFA.

Alguns dos ensaios contactados, nomeadamente no campo do melhoramento animal e de nutrição animal, embora bem fundamentados no âmbito da pesquisa científica, pareceram-nos bem integrados nas necessidades do desenvolvimento regional, e com interesse para a implementação do PROCALFER.

Em reunião final com o Reitor Professor Fernando Real, o IUTAD mostrou total disponibilidade para intensificar a sua colaboração ao PROCALFER, através da articulação de programas de investigação do Instituto nos domínios referidos do melhoramento e nutrição animal com os objectivos do PROCALFER, da formação de extensionistas especializados, da colaboração de técnicos do IUTAD em assuntos específicos do conselho de extensão e, no domínio da análise e conselho de fertilidade.

4. Balanco das actividades do PROCALFER na região

As realizações levadas a efeito na região de Trás-os-Montes, no âmbito do PROCALFER, em 1983 e 1984 (até 30/9) foram as seguintes:

	1983	1984
Área beneficiada	2439	-
Análises efectuadas	4900	10167
Calcáreo utilizado	6262,95 t	5359,01 t
Campos de demonstração	270	254
Visitas de agricultores		
a campos de demonstração	799	-
Campos de experimentação	18	-

Os dados relativos a 1983 foram obtidos na consulta do "Relatório de Actividades 1983"; a informação referente a 1984 ainda bastante incompleta foi fornecida na reunião realizada com o coordenador regional em Vila Pouca de Aguiar. A análise crítica destes indicadores e os elementos recolhidos nas visitas, entrevistas e reuniões realizadas permitem extrair algumas conclusões em relação ao funcionamento do PROCALFER na região de Trás-os-Montes.

a) Verifica-se uma relação directa entre a área beneficiada e o número de conselhos de adubação, não se verificando o mesmo em relação à distribuição de calcáreo.

Em 1984 regista-se um notável crescimento do número de conselhos de adubação traduzidos pelo número de análise efectuadas.

O não acompanhamento do crescimento do calcáreo utilizado, parece indicar que o agricultor não segue o conselho de adubação, o que pode acontecer por insuficiente motivação através dos campos de demonstração por deficiente divulgação do Programa pelos serviços de extensão rural, ou por carência de capacidade económica para aquisição de calcáreo.

A informação recolhida na Capolib traduz uma retracção no consumo de fertilizantes e calcáreo que não deve ser imputado apenas a causas económicas.

As acções de extensão e transmissão de PROCALFER devem ser intensificadas, até porque a viabilização das infraestruturas construídas depende da sua utilização. Além disso os ganhos de aumento de produção serão sempre mais significativos nas zonas mais deprimidas; a zona de Boticas onde está instalada a Capolib tem boas potencialidades para a produção pecuária (bovinos e pequenos ruminantes) desde que se proceda a uma acção de melhoramento das pastagens, em que o vector correcção e fertilização do solo será dos mais importantes.

b) Em 1983 existiam na região 270 campos de demonstração, número que parece ter baixado em 1984.

O facto de estes campos terem sido visitados por apenas 799 agricultores indica que não se registou uma utilização eficaz destas unidades.

Por outro lado concluiu-se das visitas efectuadas pela Missão de Avaliação que não é recolhida nos campos de demonstração toda a informação possível, nomeadamente em termos de produções físicas, referências técnicas e referências económicas, indicadores que serão de grande interesse para a divulgação das tecnologias que PROCALFER pretende difundir.

Se tivermos em conta o elevado custo dos campos torna-se necessário um planeamento mais eficaz da sua utilização (visitas de agricultores) e uma recolha mais intensa de informação possível.

c) A componente experimentação que deverá constituir uma base de apoio fundamental ao PROCALFER, evidencia-se muito pouco desenvolvida. Em 1983 existiam apenas 18 campos de ensaio na região, o que se considera insuficiente; a instalação destes campos deve ser futuramente intensificada, para recolha de elementos referentes a ensaios de sistemas de culturas, a adaptação de cultivares forrageiras e cerealíferas e a determinação das respectivas respostas a diferentes níveis de fertilização.

A existência na região de outros campos de ensaio, levados a efeito no âmbito do Programa Integrado de Trás-os-Montes, da Direcção Geral de Agricultura e do Instituto Universitário de Trás-os-Montes e Alto Douro (IUTAD), impõe que se recomende a coordenação no planeamento das acções de experimentação, afim de evitar escusados dispêndios de meios humanos e materiais.

d) O nível de preparação e formação dos técnicos extensionistas da região parece-nos bastante satisfatório.

A região dispõe de um número razoável de técnicos jovens, que devidamente enquadrados podem assegurar a implementação do PROCALFER e a continuação da sua mensagem.

e) O contacto com o IUTAD evidenciou que este organismo está suficientemente apetrechado para continuar a dar resposta às exigências do PROCALFER no domínio da análise de terras e conselhos de fertilização.

Parte importante do laboratório de análise de terras foi adquirido através de dotações do PROCALFER.

O IUTAD mostra-se receptivo a dar início a actividades nos sectores da produção de forragens (estudo de cultivares, multiplicação de sementes, estudos de utilização de forragens, estudos de melhoramento animal, etc.) formação de extensionistas especializados, instalação de campos de demonstração, estudo dos sistemas culturais e investigação de apoio ao PROCALFER.

f) Tem sido muito escassa a utilização das linhas de crédito PROCALFER nesta região. Os dados disponíveis indicam que foram feitos os seguintes financiamentos:

- . Construção de fábricas de calcáreo: 80000 contos à Cooperativa do Marão.
- . Construção de armazéns: 17726 contos

Foram concedidos ainda 11330 contos de subsídios para a construção de armazéns. Não foram utilizadas as linhas de crédito para acções ao nível da produção (Linhas C - Distribuição de calcáreo; Linha D - Investimento). Causas de diversa ordem tem contribuído para o reduzido recurso ao crédito. Os contactos mantidos permitem apontar como mais importantes as seguintes causas:

- . Reduzido número de técnicos extensionistas para apoio ao crédito.
- . Escassa divulgação do "crédito PROCALFER"
- . Indefinição por parte dos organismos que intervêm no processo (IFADAP e Grupo Coordenador) dos critérios de elegibilidade das diversas linhas.
- . Demora na tomada de decisão por parte do IFADAP.
- . Burocracia muito complexa no processo de contratação dos empréstimos.

A divulgação do crédito PROCALFER junto dos agricultores só deve ser implementada após a resolução das divergências evidenciadas.

g) Parece muito discutível a localização da instalação de preparação do calcáreo da Cooperativa do Marão. As distâncias a percorrer entre a mina de maior capacidade de produção e a instalação de moenda, a natureza dos caminhos e as características da própria rede viária principal, dificultam a extração do calcáreo e encarecem a sua preparação e distribuição.

É de prever que os custos de utilização venham a ser gradualmente agravados em função do acréscimo dos custos energéticos.

5. Conclusão

As visitas efectuadas na Região de Trás-os-Montes evidenciam que tem sido criados os suportes técnicos (extensão - análises de terra) para permitir incrementar o PROCALFER na Região.

Alguns estrangulamentos identificados, nomeadamente em relação à implantação da unidade produtora do Marão, são neste momento irreversíveis.

Em relação às causas que eventualmente tem conduzido a menor aderência dos agricultores aos objectivos do Programa, elas podem ser ultrapassadas desde que se registre um reforço de técnicos de extensão rural e um esforço na sua preparação.

A desmotivação das cooperativas agrícolas para a comercialização do calcáreo deve ser ultrapassada através de reuniões com os responsáveis, uma vez que se considera de toda a conveniência o envolvimento das cooperativas na divulgação e apoio ao Programa.

A formação de técnicos extensionistas pode ser melhorada devendo-se para o efeito aproveitar o suporte científico do IUTAD; esta orientação implica uma articulação

entre os objectivos daquele Instituto, do MAFA e do PROCALFER, devendo ser levado a efeito um levantamento exaustivo da situação e um planeamento das acções a empreender. O extensionista para além do conhecimento de técnicas de abordagem e motivação do agricultor, deve possuir profundos conhecimentos de tecnologia da produção para poder transmitir concretamente a mensagem de mudança da agricultura que PROCALFER envolve.

II.2 Região de Entre Douro e Minho

1. Caracterização sumária da região

A região de Entre Douro e Minho tem a área global de 850 000 hectares.

A distribuição dos sistemas agrícolas é condicionada basicamente pelo acidentado do território e pela influência que esta característica transmite à ecologia regional.

Os solos, dada a origem geológica granítica e à ocorrência de um clima muito pluvioso, são sempre muito ácidos.

Os sistemas culturais actualmente praticados nas zonas de topografia menos acidentada são bastante intensivos, empregam reduzido quantitativo de nutrientes, não recorrem a tecnologias de correcção da acidez e recorrem ainda a tecnologias intensivas em mão-de-obra.

Estas circunstâncias traduzem-se na obtenção de produtividades físicas por unidade de factor reduzidas, e bastante aquém das potencialidades agro-climáticas da região.

A visita da Missão e os contactos mantidos incidiram essencialmente na zona ecológica da várzea de solos enriquecidos através de grandes incorporações de matéria orgânica, mas muito ácidos.

Toda esta zona é cenário de sistemas culturais muito intensivos irrigados, em que as culturas se sucedem com intervalos curtos e ocorrem frequentes formas de associação cultural (do tipo do milho com feijão por exemplo), conduzindo a elevadas taxas de produtividade primária, e que asseguram um aproveitamento integral das características pedoclimáticas do meio ambiente.

É a grande zona do leite do Noroeste, com acentuado impacto da produção forrageira e em que as culturas principais são o milho, a batata, os prados, as ferrãs e o milho.

A configuração dos campos, as plantações da vinha em bordadura, a dispersão das parcelas e a dimensão da propriedade, condicionam a economia das explorações e a modernização tecnológica.

A adopção de esquemas correctos de fertilização constitui um meio de fácil utilização e rápida resposta mesmo perante os condicionalismos referidos, que racionalmente utilizado pode contribuir para o aumento significativo da produção agro-pecuária.

2. A organização dos serviços

A forma como foi preparada a visita da Missão de Avaliação pela Direcção Regional bem como a informação distribuída não permitiu uma visão global e quantificada da organização dos serviços do MAFA na região.

Os serviços não dispõem de orgânica aprovada circunstância que contribui para as suas deficiências de funcionamento. Esta situação tem sido melhorada pela implementação do PROCALFER, como se verificou no contacto com a zona agrária de Barcelos.

No entanto nesta zona agrária, como nas estações experimentais visitadas (Merelim e Barcelos) regista-se uma impressionante falta de quadros técnicos de nível médio e superior.

As limitações dos serviços de extensão rural em quadros e orgânica pode constituir um estrangulamento importante à evolução do PROCALFER na região.

Este facto pode ser acentuado pelas exigências resultantes de se encontrarem em funcionamento ou preparação na região outros programas que não sendo concorrentes com o PROCALFER em termos de objectivos, implicam no entanto a dispersão de um quadro técnico já por si pouco numeroso.

Na impossibilidade de alargar o quadro de extensionistas, torna-se necessário proceder a uma cuidada coordenação, que evite dispersões inúteis e concorrências que não têm razão de ocorrer.

3. Visitas efectuadas na região de entre Douro e Minho

A Missão foi recebida na Estação Agrária de Merelim e visitou campos de demonstração na zona de Barcelos. Teve ainda ocasião de trabalhar com os técnicos da zona agrária de Barcelos e de visitar a cooperativa agrícola de Vila do Conde.

3.1 Reunião na Estação Agrária de Merelim

A Reunião realizada na Estação Agrária de Merelim com a presença do sub-director da região de Entre Douro e Minho e do Coordenador Regional do PROCALFER, permitiu à Missão de Avaliação recolher elementos importantes sobre a forma como as metas do PROCALFER estão a ser concretizadas na região.

Embora sendo conhecida na região a limitação que a acidez dos solos colocava à evolução da produtividade das culturas, foi somente após o lançamento do PROCALFER que se tem divulgado a prática do conselho de fertilização através da análise de terras.

Foi através do PROCALFER que foi equipado o Laboratório de Análise do Solo da Estação Agrária do Porto o que permitiu aumentar substancialmente a sua capacidade de resposta neste sector, e a transmissão em tempo oportuno do conselho de fertilização aos extensionistas e aos agricultores.

Acentuando a acção do PROCALFER, a existência do Programa de Produção de milho tem contribuído para divulgar na região a prática das calagens; a possibilidade de recorrer sistematicamente à análise de terras conduziu a uma racionalização da informação transmitida ao agricultor.

Os resultados da importância da calagem nos sistemas culturais tem sido confirmado através dos aumentos de produção na cultura do milho em que como resultado da aplicação do calcáreo se tem alcançado aumentos de produção de 3 a 5 toneladas por hectare.

A Estação de Merelim orienta a sua acção fundamentalmente para a experimentação. Dando sequência aos objectivos do PROCALFER têm sido realizados ensaios de adaptação e comportamento perante a correcção e fertilização do solo de diversas cultivares forrageiras e de milhos. Embora se registre a colaboração do PROCALFER no equipamento em material para ensaios verifica-se ainda uma grande insuficiência de material básico de apoio. Isto não significa que se deva orientar a actuação das regiões no sentido de estabelecer em cada uma delas estruturas paralelas de investigação, que dispersam meios e material científico e não melhoram a qualidade de trabalho produzido.

A investigação de apoio ao PROCALFER deve ser centralmente coordenada de forma a aproveitar estruturas existentes (INIA, IUTAD, ISA, etc.); as regiões devem ser preparadas e apetrechadas com o equipamento indispensável para apoio as tarefas de investigação a efectuar nos organismos especificamente dotados.

A Estação orienta igualmente a instalação dos campos de demonstração no âmbito do Programa.

Em 1983 foram instalados 360 campos de demonstração de milho, prados e farras; este número baixou em 1984 para 200 campos.

3.2 Visita a campos de demonstração na zona de Barcelos.

Foi visitado um campo de demonstração de milho e contactado o respectivo agricultor. O campo foi instalado pelo Serviço de extensão da zona agrária com a colaboração do PROCALFER. O agricultor evidência acentuado sentido de progresso revelando conhecer a importância da calagem no acréscimo da produtividade do solo.

Como se verifica na generalidade dos campos de demonstração visitados, regista-se uma deficiente utilização deste recurso da extensão, não sendo retiradas referências técnico-económicas que permitiriam uma melhor informação sobre a tecnologia a divulgar.

3.3 Reunião de trabalho na zona agrária de Barcelos.

A zona agrária de Barcelos pareceu-nos dotada de quadros competentes e interessados, embora pouco numerosos face as exigências do Programa. Dispõe apenas de três técnicos extensionistas para uma zona de grande potencialidade

produtiva.

A zona agrária tem instalados campos de demonstração de fertilização e correcção em culturas forrageiras e milho.

Procede igualmente a organização de visitas de agricultores aos campos de demonstração, a colheita de amostras em explorações agrícolas e ao acompanhamento das acções de correcção e fertilização.

No âmbito do PROCALFER os serviços de extensão vão dar início a acções de formação a dirigentes de cooperativas com vista a prepará-los como primeiros agentes de extensão rural junto dos aderentes das cooperativas.

Igualmente tem implantado em todos os concelhos abrangidos campos de demonstração integrados de agricultura e pecuária, que permitem aos agricultores verificar o elevado potencial das culturas forrageiras e observar o efeito importante das técnicas de fertilização e correcção do solo sobre o rendimento físico das culturas.

3.4 Visita a Cooperativa Agrícola de Vila do Conde

A cooperativa agrícola de Vila do Conde agrupa 3000 associados.

A construção de parte das instalações da cooperativa foi realizada através da utilização da linha de crédito PROCALFER para a construção de armazéns.

A cooperativa presta serviços no domínio da compra e venda de factores de produção e produtos.

A análise dos Relatórios de Contas da Cooperativa de Vila do Conde demonstra que o respectivo valor global de vendas que em 1977 era de 194 mil contos atinge actualmente 1200 mil contos.

A cooperativa presta ainda um apoio muito válido aos produtores através da prestação de serviços de assistência veterinária, controlo pecuário, formação profissional.

No sector de aprovisionamento em correctivos e fertilizantes, a variação de valores comercializados entre 1980 e 1983 traduz-se nos seguintes indicadores.

Calcáreo: 420 - 3690 ton.

Aubos fosfatados: 896 - 407 ton.

Aubos potássicos: 26 - 24 ton.

A cooperativa de Vila do Conde tem uma estrutura de apoio bastante limitada face a diversidade de produtos comercializados, circunstância que pode actuar a médio prazo como estrangulamento ao desenvolvimento da agricultura regional.

Na cooperativa de Vila do Conde tivemos ocasião de realizar uma breve reunião com agricultores. Constatou-se que embora tratando-se de empresários evoluídos e receptivos aos benefícios derivados de uma correcta fertilização dos solos, esta tecnologia é conduzida de forma empírica, sem qualquer controlo da evolução de outros indicadores da fertilidade. Por outro lado, em geral desconheciam a existência do PROCALFER.

Esta situação pode originar fracassos num horizonte de médio prazo, e está sem dúvida associada ao reduzido número de extensionistas actuando junto dos agricultores.

4. Balanço das actividades do PROCALFER

Dada a escassez de elementos quantificados que nos foram facultados, o balanço das actividades do PROCALFER na região de Entre Douro e Minho fundamenta-se muito em observações qualitativas.

	1983	1984
Análises efectuadas	.	10000
Calcáreo utilizado	29983 t	29213 t
Campos de demonstração	360	300
Visitas de agricultores a campos de demonstração		500
Campos de experimentação		12

O balanço da informação recolhida, permite extrair as seguintes conclusões em relação a situação do Programa na Região:

a) Regista-se uma acentuada relação entre a utilização de calcáreo e o número de conselhos de fertilização traduzidos pelo número de análises efectuadas. De acordo com as informações fornecidas pelo Coordenador do Programa o número médio de análises antes da implementação do PROCALFER não excedia 1000/ano, o que evidência que foi a partir do Programa que foi possível não só divulgar a análise de terras como adquirir capacidade de resposta satisfatória a nível laboratorial.

O contacto com os técnicos extensionistas revelou no entanto, um acentuado empirismo na utilização dos resultados da análise de terras e na prática sistematizada da calagem, sem acompanhamento e controlo da evolução da matéria orgânica do solo; esta situação pode a médio prazo comprometer os resultados visados de aumento da produção de forma estimada.

É necessário para evitar estas limitações intensificar as acções de formação dos extensionistas na óptica do interesse da calagem na dinâmica dos sistemas culturais.

Alguns elementos de informação obtidos na Cooperativa de Vila do Conde evidenciam acentuada retracção no consumo de adubos fosfatados e potássicos e confirma que o conselho de adubação não estará a ser devidamente seguido pelo agricultor, o que pode resultar da deficiente motivação através dos campos de demonstração ou por deficiente actuação dos serviços de extensão.

O limitado número de extensionistas a actuar na região e como foi referido algumas lacunas na sua formação no sector da fertilidade podem constituir importantes estrangulamentos ao êxito do PROCALFER.

A acção formativa a empreender junto dos gerentes de cooperativas pela zona agrária de Barcelos pode auxiliar a resolver alguns problemas derivados da escassez de técnicos extensionistas; no entanto aqueles elementos devem ser devidamente enquadrados e suficientemente informados para que a acção a desempenhar na promoção do PROCALFER não resulte num fracasso.

b) O número de campos de demonstração existentes na região foi reduzido entre 1983 e 1984.

Por outro lado o reduzido número de visitas efectuadas indica que não se tem registado uma utilização eficaz deste recurso de extensão.

Como já foi evidenciado em relação à região de Trás-os-Montes, não é integralmente utilizada a eficácia dos campos de demonstração através da recolha da informação técnica e económica que fornecem; a preparação dos técnicos extensionistas deve permitir suprir esta lacuna conduzindo ao integral aproveitamento deste recurso cuja instalação e manutenção se revela muito dispendiosa.

c) A componente experimentação do PROCALFER encontra-se bastante pouco desenvolvida na região. Não existe qualquer estrutura de apoio e os serviços encontram-se bastante mal apetrechados no equipamento mínimo indispensável. A necessidade de prosseguir com os ensaios sobre fertilidade, adaptação de cultivares, multiplicação de sementes e estudos de sistemas culturais evidenciam o interesse de através do PROCALFER iniciar os estudos de apoio a produção.

d) A existência de outros programas de produção na região que se podem apoiar e

dar sequência às acções desenvolvidas no âmbito do PROCALFER pode ser uma via de actuação com interesse, desde que as acções sejam devidamente integradas e coordenadas.

No entanto a diversidade dos programas por conduzir a dispersão de recursos humanos reduzidos pode apresentar inconvenientes.

A formação de extensionistas deve ser concertada podendo o PROCALFER dinamizar este vector de desenvolvimento dos programas e de acréscimo da produção.

e) Tal como se regista na região de Trás-os-Montes a utilização das linhas de crédito PROCALFER na região tem sido muito limitada. Esta situação é mais acentuada em relação as linhas destinadas à construção de armazéns foi financiada a construção de uma área coberta de cerca de 27948 m.q; regista-se no entanto a concentração de importantes verbas numa unidade cooperativa, a UCANORTE. Esta circunstância associada a eventuais retracções no consumo de fertilizantes e calcáreo, pode dar origem a situações complexas, pelo que se torna necessário implementar acções formativas para gestores de cooperativas que tem cabimento pleno nas actividades do PROCALFER.

A Missão confirmou que grande parte das dificuldades no acesso ao crédito por parte dos agricultores e mesmo das cooperativas resulta de dificuldades burocráticas na organização dos processos de crédito, na formalização das garantias e na apresentação correcta dos justificativos.

Esta situação pode conduzir a limitar substancialmente as acções do PROCALFER, transformando-o num Programa de constituição de estruturas de apoio a produção, o que se considera bastante aquém das possibilidades e metas consideradas.

5. Conclusão

O PROCALFER tem sido implantado na região de Entre Douro e Minho nomeadamente no âmbito do apoio às cooperativas e principalmente na construção de armazéns.

O elevado valor dos montantes envolvidos deve colocar problemas de gestão às empresas que o PROCALFER deve acompanhar através da formação de gestores.

O consumo de calcáreo tem manifestado tendência para estacionar, o que impõe uma acção reforçada nos serviços de extensão do MAFA. A impossibilidade ou dificuldade em completar os quadros da Direcção Regional tem constituído importante estrangulamento ao desenvolvimento do PROCALFER que se torna urgente desbloquear.

II.3 Região da Beira Litoral

1. Caracterização sumária da região

A Beira Litoral ocupa uma área de 1170000 hectares distribuídos pelos Distritos de Coimbra, Aveiro, Viseu e Guarda.

Trata-se de uma região bastante diferenciada do ponto de vista geográfico e edafoclimático, circunstância que se traduz por uma grande variedade de paisagens agrárias.

Genéricamente trata-se de uma região de agricultura muito específica sofrendo profunda transformação por incidência do impacto da penetração da indústria no espaço rural.

A Missão visitou basicamente duas zonas desta região: o Litoral Sul, onde predominam empresas familiares com actividade agrícola muitas vezes em tempo parcial e orientação produtiva policultural de regadio; predomina nesta zona a produção forrageira (milho forragem e prados) e a produção de bovinos de leite. São sistemas culturais bastante semelhantes aos do litoral do Entre Douro e Minho, embora a estrutura empresarial seja mais favorável.

A segunda zona visitada foi a de Lafões em que a par dos sistemas arvenses de regadio com orientação produtiva idêntica à da zona anterior, tem relevância os sistemas florestais e vitícolas.

Em qualquer das zonas se evidencia um marcado sentido de progresso que se consubstancia através de uma organização associativa bastante avançada e da prática generalizada de sistemas produtivos evoluídos.

2. A organização dos serviços

O contacto com a região da Beira Litoral incidiu apenas sobre duas zonas agrárias (Tondela e Gândaras) de cujo funcionamento, actividade e resultados nos foram transmitidos alguns indicadores.

Complementarmente foi realizada na sede da Direcção Regional em Coimbra uma reunião de trabalho com o corpo técnico mais responsável pela implementação do Programa.

Na zona agrária de Tondela foi efectuada uma reunião, em Oliveira de Frades, através da qual foi apresentada à Missão uma imagem do funcionamento do PROCALFER na Sub-Região de Viseu.

A organização dos serviços pareceu bastante satisfatória e o dinamismo das equipas extensionistas igualmente bastante favorável.

Idêntica imagem sobre a organização dos serviços foi retirada no contacto com a zona agrária das Gândaras.

Verifica-se que o PROCALFER tem contribuído para implementar o equipamento material das zonas agrárias, nomeadamente em meios audiovisuais, o que tem estimulado o trabalho dos extensionistas e provocado uma correcta actuação no sentido de transmitir aos agricultores toda a dinâmica da mensagem do Programa.

Foi no entanto constatada uma acentuada disparidade entre os meios audiovisuais disponíveis, e o apetrechamento das equipas em meios de transporte.

Esta situação, que se prende com questões orçamentais do Ministério da Agricultura, pode criar grandes dificuldades ao funcionamento do PROCALFER, e impossibilitar a acção dos extensionistas.

De qualquer modo tem sido através de dinâmica imprimida pelo PROCALFER que os serviços de extensão rural têm avançado no sentido da formação de quadros e de agricultores e na utilização dos campos de demonstração como meio de veicular a informação, extremamente válido.

Em qualquer dos serviços contactados se retirou a convicção de uma boa organização das equipas e de grande entusiasmo pelas tarefas a desenvolver.

Importante estrangulamento a nível de região deriva da falta de implementação das zonas agrárias, encontrando-se neste momento 13 concelhos sem apoio técnico.

Um outro aspecto evidenciado nos contactos estabelecidos com a Direcção Regional,

que de resto e comum a todas as Direcções Regionais visitadas resulta da diversidade de tarefas que são atribuídas aos técnicos de extensão rural, tarefas por vezes de natureza administrativa, que assim dispersam demasiadamente a sua actividade.

3. Visitas efectuadas na região da Beira Litoral

A Missão estabeleceu contactos com as zonas agrárias de Tondela e das Gândaras, tendo visitado campos de demonstração nestas duas zonas e contactado agricultores.

3.1 Contacto com a zona agrária de Tondela

O contacto com esta zona agrária evidenciou a existência de serviços de extensão bastante capacitados sobre a natureza das tarefas a desenvolver, e com um nível de organização e preparação bastante satisfatório.

Fornecendo um panorama detalhado da sub-região de Viseu, a equipa de extensão conseguiu transmitir uma imagem de eficácia e de dinamismo, que se realça.

O facto de a equipa integrar apenas quatro técnicos extensionistas, constitui no entanto um estrangulamento importante na expansão do Programa.

Esta circunstância não invalida, que se tenha apreciado a vontade e o elevado sentido das responsabilidades dos extensionistas contactados durante a reunião.

Nesta zona agrária foi visitada uma cooperativa agrícola em Oliveira de Frades cujas instalações foram em parte construídas através da linha de crédito do PROCALFER. Trata-se de uma cooperativa de compra-venda que tal como a generalidade das visitadas não possui qualquer serviço administrativo organizado.

3.2 Visita a campos de demonstração na zona de S. Pedro do Sul.

Foi visitado um campo de demonstração de efeitos da fertilização em prados de gramíneas e leguminosas na zona planáltica. Esta visita coincidiu com uma visita de agricultores acompanhados por um extensionista da região.

A visita e a acção de extensão que acompanhou confirmaram a imagem de dinamismo anteriormente retida.

As próprias dúvidas apresentadas pelos agricultores em relação à economia da tecnologia a divulgar, confirmam a necessidade de aproveitar mais intensamente os campos de demonstração, com vista a recolher elementos físicos e económicos que caracterizem o respectivo balanço de "inputs-outputs".

No entanto é nossa convicção que o trabalho desenvolvido nesta sub-região pelos serviços de extensão divulga de forma conveniente os objectivos do PROCALFER e constitui assim um apoio válido à expansão do Programa.

As entrevistas mantidas com agricultores evidenciaram no entanto algum desencontro entre objectivos fixados no PROCALFER, decisões do Grupo Coordenador e metas de produção da Direcção Regional.

Sendo PROCALFER um programa que visa aumentar a produção e a produtividade através de melhoria dos sistemas culturais, e devendo o programa servir os agricultores e ser por eles aceite e não imposto, considera-se fundamental harmonizar objectivos e orientações com vista a evitar críticas e objecções como as que foram apresentadas.

3.3 Contacto com a zona agrária das Gândaras

A zona agrária das Gândaras é apoiada por uma equipa extensionista bem integrada nos objectivos do desenvolvimento da agricultura regional.

Integra cerca de 8 elementos e dispõe de meios audiovisuais satisfatórios.

Tem actuado no sentido de promover acções integradas no PROCALFER: novos sistemas culturais; conselhos de fertilização; campos de demonstração; acções de crédito.

Na sequência da visita a zona agrária foram estabelecidos contactos com agricultores, participando a Missão numa acção de dinamização.

Os agricultores contactados, revelam uma boa integração nos objectivos da

extensão rural e nas metas do PROCALFER.

Encontram-se no entanto bastante mal informados sobre as possibilidades do Programa em relação ao crédito.

4. Balanço das actividades do PROCALFER na região

A informação sobre o funcionamento do PROCALFER na região da Beira Litoral, ainda que bastante vasta, não permite estabelecer um quadro de referência global. É uma informação fraccionada sobre as realizações levadas a cabo nas várias zonas visitadas, que fornece no entanto uma visão bastante aproximada da evolução do Programa na Beira Litoral.

a) A utilização de calcáreo e a evolução do número de análises de terras tem sido bastante desigual nas duas zonas contactadas.

Na sub-região de Viseu foram efectuadas em 1983 2073 amostras que deram origem a outros tantos conselhos de adubação; até 30 de Setembro de 1984 este valor foi de 1790. No início da dinamização do PROCALFER na região o número de amostras recolhidas para análise era de 1756 (1981) o que evidencia um crescimento muito reduzido e revela apesar de tudo pouco dinamismo do programa.

Em relação ao consumo de calcáreo os valores fornecidos revelam que se passou de um consumo de 1756 ton. em 1981 para 3517 ton. em 1984; assim o consumo de calcáreo cresceu de forma mais significativa e mais de acordo com os objectivos do programa.

Na zona agrária das Gândaras constatou-se que o número de análises de terras efectuadas baixou nitidamente entre 1983 e 1984, passando de 2073 para 550.

Estes números confirmam o reduzido apoio técnico do PROCALFER na região.

Como se verificou em todas as regiões visitadas esta situação deriva da deficiente organização dos serviços do Ministério da Agricultura sendo agravada pela impossibilidade de promover a contratação de novos quadros. A resultante da situação tem sem dúvida limitado a implementação do Programa e o seu impacto no crescimento da produção agrícola.

b) A sub-região de Viseu dispõe de uma rede de armazéns destinados ao calcáreo e fertilizantes bastante importante.

A área global programada é de 8780 m² em 14 armazéns; de momento encontram-se construídos 9.

Esta infraestrutura deve permitir o apoio necessário à agricultura regional.

c) Os campos de demonstração instalados tem visado as culturas forrageiras, enquadrando aspectos relativos à adaptação de cultivares e à sua resposta à fertilização.

A partir de 1981 foram instalados 468 campos de demonstração; em 1984 na sub-região de Viseu foram instalados 262 campos.

Estes campos foram visitados por 1704 agricultores, dos quais 670 participaram pela primeira vez neste tipo de acção.

O grau de aderência dos agricultores ao PROCALFER parece ser bastante elevada apesar do reduzido número de técnicos extensionistas envolvidos no programa.

Constata-se por parte do agricultor um crescente interesse pelo conselho de fertilização, o que significa que se apercebeu da importância da melhoria da fertilidade do solo para incrementar a produtividade das suas culturas.

Tal como em outras regiões regista-se um deficiente aproveitamento dos campos de demonstração, não só pelo reduzido número de visitas efectuado como pela quantidade de elementos de informação que não são recolhidos nos campos.

Um outro aspecto que se extraiu do contacto com os agricultores, é o de que não há um acompanhamento sequencial de exploração após o conselho de fertilização.

Mais uma vez se refere que esta limitação pode suscitar problemas ao normal funcionamento do Programa, nesta como nas outras regiões.

d) O vector da experimentação tem tido uma expansão limitada na região, não obstante se ter verificado que o PROCALFER tem fornecido um certo apoio neste sentido.

e) A utilização do crédito ao nível das empresas agrícolas de produção tem sido praticamente nula. Dificuldades e entraves de vária ordem tem limitado a implementação de linhas de crédito que possam contribuir directamente para incrementar a produção agrícola.

Em alguns casos tem ocorrido mesmo divergências entre as orientações dos coordenadores do PROCALFER e os técnicos do crédito dos serviços regionais, que provocam situações pouco aliciantes para os agricultores. Este aspecto deve ser revisto uma vez que se considere que estão criadas neste momento os apoios a montante da produção agrícola (produção de calcáreo, extensão rural, apoio laboratorial) que aliciam o agricultor para medidas de fomento da produção agro-pecuária.

A simplificação dos processos de prestação de garantias pelos mutuários e a redução dos prazos de análise e contratação dos empréstimos são medidas que se impõe neste domínio.

5. Conclusão

O balanço do Programa PROCALFER na região da Beira Litoral pode considerar-se positivo.

Através do programa desenvolveu-se uma dinâmica apreciável nos domínios da extensão rural, que deu origem a um incremento das acções de demonstração de novas tecnologias produtivas, de formação de agricultores e de formação dos próprios extensionistas, que será apoio muito valioso para o esforço de acréscimo da produção que através deste e de outros programas se torna necessário empreender na região.

A Missão identificou no entanto algumas lacunas derivadas essencialmente do limitado âmbito das componentes de produção desenvolvidas pela extensão e do reduzido número de quadros de extensionistas em acção.

O primeiro aspecto tem conduzido a que os campos de demonstração instalados visem sobretudo problemas de fertilização, não desenvolvendo acções no domínio da divulgação das forragens, do estudo dos sistemas culturais, do ensaio de novas cultivares, etc.

Nesta mesma linha regista-se a ausência de trabalhos de experimentação que sirvam de suporte ao estudo das tecnologias a divulgar.

No domínio do crédito foram encontrados problemas idênticos aos registados nas restantes regiões e que originam uma gravosa morosidade e complexidade dos processos apresentados.

II. AVALIACÃO DOS SUB-PROJECTOS (Evaluation of Sub-Projects)

(d) DEFICIÊNCIAS E PROBLEMAS NA IMPLEMENTAÇÃO (Deficiencies and problems in implementation of activities)

1. GERAL

O PROCALFER é um programa complexo comportando diversas actividades ou sub-projectos.

O desenvolvimento e importância destas actividades no Programa é bastante diferenciado.

A Missão de Avaliação procurou identificar estas actividades e localizar as suas deficiências e problemas na implementação.

A conclusão do balanço final da avaliação do PROCALFER é positivo, embora se reconheça a existência de algumas insuficiências.

O Programa tem até agora incidido fundamentalmente nas seguintes actividades:

i - Actividades a montante da produção agrícola

- Produção, transporte e distribuição de calcário
- Análise e correcção de solos
- Extensão rural
- Investigação
- Crédito a armazenagem e produção de calcáreo

ii - Actividades de produção agrícola

- Incremento de novos sistemas culturais
- Crédito a transformação e intensificação das condições de produção agro-pecuária

iii - Actividades a jusante da produção agrícola

- Estudos de política agrícola e de mercados agrícolas

iv - Actividades de Coordenação e Administração

Embora a Missão reconheça o esforço desenvolvido na estruturação e implementação do PROCALFER alguns objectivos visados foram apenas parcialmente alcançados. Por outro lado a actuação do Programa tem incidido nomeadamente em actividades preparatórias das condições que conduzirão à realização do objectivo final de aumentar a produtividade e à produção da agricultura.

2. BREVE ANÁLISE DAS DEFICIÊNCIAS E PROBLEMAS IDENTIFICADOS

As principais deficiências e problemas identificados serão apontados sumariamente na intenção de melhorar futuramente o resultado das actividades ou sub-projectos.

2.1 Produção, transporte e distribuição de calcáreo.

A actual produção de calcáreo permite satisfazer as necessidades da procura. A acção do PROCALFER neste domínio, consistiu em criar condições de produção e armazenamento do calcáreo necessario a agricultura. O consumo de calcáreo registou em 1983 um crescimento de 33%; de acordo com a informação recolhida nas regiões esta tendência não se tem mantido em 1984, pelo que devem ser desencadeadas medidas par inverter a situação. A política de subsídios e de empréstimos conduziu a bons resultados, embora a concessão dos empréstimos tenha obedecido a processos muito morosos e complexos. Os principais problemas identificados em relação a este sub-projecto, são os seguintes:

* Devem ser desenvolvidos esforços no transporte e distribuição a granel, que de momento se afiguram mais eficientes e com menores custos.

* No Norte justifica algumas reservas à instalação da Corcoop na serra do Marão. Embora esta unidade permita satisfazer as necessidades de calcáreo do Noroeste no futuro próximo, os custos da produção e transporte serão sempre muito elevados, com reflexos no interesse dos agricultores na utilização do produto.

* A distribuição de calcáreo tem registado uma certa tendência para a estabilização, o que não se compatibiliza com as necessidades em calcáreo da generalidade dos solos. Esta situação foi constatada em quase todas as regiões do Norte e Centro visitadas e pode estar ligada a deficiências dos serviços de extensão ou à falta de linhas de crédito para a utilização de calcáreo; as linhas de crédito existentes para concretização deste objectivo (Linha C) não estão a ser utilizadas da forma prevista.

* A aplicação do calcáreo no Sul, sobretudo na Região do Alentejo, tem sido insufficiente. A inexistência de um forte sector cooperativo, as menores necessidades dos solos e a não divulgação de sistemas culturais mais intensivos e racionalizados justificam esta situação. Deverá ser desenvolvido um esforço de dinamização dos serviços de extensão com vista a implementar nesta região o consumo de calcáreo, ultrapassando os gargalos existentes.

2.2 - Análise e correcção do solo

Este sub-projecto encontra-se muito ligado ao anterior; a análise do solo e a formulação do conselho de adubação constituem normas de apoio ao funcionamento do PROCALFER que tem sido muito dinamizadas com a implementação do Programa.

A prática do conselho de fertilização, pouco utilizada até 1980, encontra-se actualmente muito divulgada reconhecendo-se o contributo do PROCALFER nesta divulgação.

Apontam-se no entanto as seguintes limitações e insuficiências:

* O número de agricultores que está procedendo à correcção dos solos parece inferior às metas propostas.

- * Os serviços de extensão não estão a apoiar a sua acção em termos de conselho de fertilização, não utilizando cabalmente os resultados da análise.
- * Em algumas regiões os serviços de extensão nao procedem a um acompanhamento da evolução da fertilidade do solo, em consequência da calagem.
- * A capacidade de resposta dos laboratórios na realização das análises parece ser satisfatória, embora em alguns casos esta tarefa seja muito morosa.
- * O equipamento fornecido no âmbito do Programa não está a ser cabalmente utilizado.
- * Em algumas regiões do Norte e Centro está a diminuir o número de análises efectuadas.

2.3 Extensão rural

Embora se reconheça o esforço desenvolvido pelos extensionistas nas regiões visitadas algumas insuficiências são referidas:

- * Os campos de demonstração, não têm sido intensamente aproveitados; o número de visitas de agricultores aos campos de demonstração tem sido bastante reduzido.
- * Nao tem havido um integral aproveitamento dos dados quantitativos (referências técnico-económicas) fornecidas pelos campos.
- * A acção demonstrativa dos campos não tem aproveitado a informação económica para evidenciar o interesse da tecnologia que se pretende divulgar.
- * Os campos de demonstração têm insistido fundamentalmente no domínio dos efeitos da calagem-fertilização, não valorizando outros aspectos da tecnologia (comportamento de cultivares; novos sistemas culturais; etc).
- * O número total de campos de demonstração instalados em 1983 e 1984 foi reduzido, e de acordo com o observado, com tendência para diminuir.
- * Embora dotados de muito boa vontade, os serviços de extensão a nível regional vem funcionando com deficiências; os atrasos na estruturação dos serviços regionais e o reduzido número de técnicos a desempenhar tarefas de extensão, têm afectado a implementação do programa.
- * A retracção verificada no que concerne ao número de análises de terras efectuadas resulta fundamentalmente da insuficiencia dos serviços de extensão, situação que condiciona o êxito do PROCALFER.

2.4 Investigação

Embora tenha havido um número considerável de campos experimentais estabelecidos no âmbito do PROCALFER, cujo interesse se reconhece, identificam-se em relação a este sub-projecto as seguintes insuficiências:

- * Ausência de um plano global de investigação aplicada, compatível com o nível técnico dos quadros e serviços do Ministério e dirigido para a resolução dos problemas regionais, prioritariamente no contexto do PROCALFER.

* Não aprovação das leis orgânicas das Direcções Regionais, o que constitui uma restrição importante ao desenvolvimento desta componente.

* Ausência de uma coordenação deste sub-projecto que estabeleça um planeamento das necessidades, e conduza ao mais racional aproveitamento das estruturas do Ministério da Agricultura (INIAER, Estações Agrárias) e do Ministério da Educação.

2.5 Crédito

Esta actividades tem sido essencialmente desenvolvida no sector do apoio à produção, através das linhas de crédito para a produção e armazenamento do calcáreo (Linhas de crédito A e B).

As principais deficiências e problemas condicionantes do desenvolvimento deste vector do PROCALFER são as seguintes:

* Escassa formação de técnicos regionais para a preparação e alaboração de projectos de acesso ao crédito.

* Deficiente coordenação entre os serviços regionais, o Grupo Coordenador, e os Gabinetes de Planeamento Regionais, na interpretação dos critérios de elegibilidade dos projectos integráveis no PROCALFER.

* Excessiva lentidão no processo análise/aprovação/contratação/libertação dos fundos considerados nos projectos, por parte do IFADAP.

* Centralização da análise dos projectos por parte do IFADAP, nao aproveitando a respectiva estrutura regional, o que para além de contribuir para a morosidade dos processos, dificulta os contactos com os serviços regionais do Ministério.

* Dificuldades na organização dos processos de prestação de garantias reais como contrapartidas dos empréstimos.

* Deficiente acompanhamento das operações de crédito contratadas (Linhas A e B) o que tem como consequência que após um complexo projecto de acesso ao crédito, não se procede a qualquer controlo e acompanhamento de utilização das verbas.

* Insuficiente divulgação das linhas de crédito do PROCALFER, nomeadamente das destinadas a apoiar a produção agrícola e a utilização de calcáreo, o que tem determinado pouca procura por parte dos potenciais interessados.

2.6 Estudo de novos sistemas culturais

Este sub-projecto deve conduzir a incrementar as acções complementares do aumento da fertilidade do solo, e de forma integrada atingir as metas-objectivos do PROCALFER de aumentar a produção.

Integrado neste sub-projecto encontram-se os sectores das forragens e prados, pastagens sob-coberto e pequenos ruminantes.

Trata-se de um sector fundamentalmente para o sucesso do PROCALFER que até à data não foi possível desenvolver convenientemente e manter sob controlo do Grupo Coordenador.

2.7 Estudos de Política e Economia Agrícola

Trata-se de um estudo de análise sectorial, de elevada qualidade em termos teóricos, mas cuja integração numa acção pragmática como deve ser o PROCALFER não se considera de primeira prioridade.

O Grupo Coordenador deve decidir sobre o interesse em manter estudos a jusante da produção agrícola, quando às acções necessárias a aumentar esta se revelam tão necessárias e exigentes em meios materiais e humanos. Não parece uma política de actuação adequada alargar demasiado o cenário dos estudos, devendo os esforços concentrar-se na acção prioritária de conseguir contribuir directamente para o aumento da produção.

2.8 Coordenação e gestão

Apesar do esforço desenvolvido pelo Grupo Coordenador existem alguns problemas neste sector:

* Existem dificuldades organizativas que dificultam a implementação do PROCALFER. Estas dificuldades resultam das deficientes ligações entre o Grupo Coordenador e o Gabinete de Planeamento do Ministério, e também da falta de ligações mais funcionais entre Coordenação Central e a Coordenação Regional.

* A libertação de fundos do PIDDAC tem sido muito morosa, situação que atrasa a realização de muitas tarefas previstas pelo PROCALFER e o próprio pagamento de subsídios.

* Regista-se tendência, a nível regional, para utilizar com outras finalidades verbas inicialmente destinadas a PROCALFER.

* A estrutura administrativa de apoio ao Grupo Coordenador é insuficiente. A situação tende a complicar-se se forem incrementadas as actividades do PROCALFER.

* Alguns sub-projectos do PROCALFER fogem ao controlo do Grupo Coordenador.

* A acção dos Coordenadores Regionais é dispersa por muitas actividades dentro do próprio serviço do Ministério.

III. PONTOS A CONSIDERAR COM MAIS RELEVO NOS PRÓXIMOS TRÊS ANOS (Recommended Project Emphasis next three years)

(a) PRESSUPOSTOS

O PROCALFER tem deparado com dificuldades de ordem técnica, institucional e organizativas, que tem condicionado a sua implementação e limitado o seu impacto na concretização dos objectivos.

O Programa tem até esta data beneficiado essencialmente actividades que visam melhorar as condições de produção.

As acções incidindo ao nível dos produtores tem sido menos intensas.

No entanto considera-se, como se referiu no ponto anterior, que o balanço final do PROCALFER tem sido positivo. Deve realçar-se o esforço do Grupo Coordenador para superar alguns dos obstáculos mencionados, o que tem permitido assegurar o

sucesso relativo de algumas componentes do Programa.

A actuação do PROCALFER nos próximos três anos deve ser orientado para melhorar as deficiências e problemas que condicionam a sua implementação, anteriormente identificadas.

É de referir no entanto que o principal estrangulamento ao desenvolvimento do PROCALFER resulta de causas exógenas ao Programa, nomeadamente da situação indefinida em que se encontra a reestruturação dos serviços do Ministério da Agricultura a nível regional, e da deficiente coordenação no interior dos serviços.

Algumas actividades ou sub-projectos do PROCALFER devem ser revistas e outras implementadas para assegurar o sucesso do Programa.

As recomendações seguidamente apresentadas resultam da apreciação dos problemas e deficiências identificados, e já abordados em pontos anteriores deste relatório.

(b) RECOMENDAÇÕES

A listagem das principais recomendações propostas será apresentada por sub-projecto.

(b.1) Produção, transporte e distribuição de calcáreo

Este sub-projecto encontra-se bastante avançado.

A capacidade de produção de calcáreo é neste momento suficiente para assegurar a procura possível. A viabilização das instalações implica no entanto o incremento do consumo.

As recomendações propostas são as seguintes:

* Estudar formas de transporte e distribuição de calcáreo que reduzam os custos (transporte e distribuição a granel).

* Medidas articuladas com outros sub-projectos que conduzam a um maior uso de calcáreo dentro da racionalidade dos sistemas culturais.

* Para combater a tendência para a estagnação do consumo de calcáreo, deve promover-se uma política de incentivos as cooperativas e implementar a utilização da linha de crédito para a aquisição de calcáreo (Linha C do PROCALFER).

(b.2) Análise e Correção dos solos

Este sub-projecto encontra-se bastante desenvolvido e em condições de assegurar a resposta necessária em termos de análises solicitadas.

Como principais recomendações apontam-se as seguintes:

* Melhorar a rapidez de entrega dos resultados das análises efectuadas, de forma a assegurar o eficaz apoio dos extensionistas aos agricultores.

* Assegurar um sistema de coordenação e acompanhamento dos vários laboratórios que prestam apoio ao Programa, de forma a obter uma melhor utilização dos meios de actuação disponíveis.

* Diversificar o tipo de análises efectuadas de modo a permitir acompanhar e corrigir o efeito de carências em micronutrientes que se venham a manifestar.

* Assegurar a formação dos responsáveis pelos laboratórios de análise de solos

com vista a evitar a estagnação e a rotina.

(b.3) Extensão rural

A dinamização dos serviços de extensão rural constitui um problema chave no êxito do PROCALFER, grande parte das dificuldades identificadas ligam-se com a reestruturação do Ministério da Agricultura e a organização das Direcções Regionais.

As recomendações propostas que procuram dar resposta aos problemas identificados são as seguintes:

- * Assegurar prioritariamente a implementação das orgânicas das Direcções Regionais, de forma a permitir dotar as zonas agrárias com os meios materiais e humanos necessários.
- * O Grupo Coordenador deve, em colaboração com os serviços de Formação Profissional, estabelecer um programa de formação de extensionistas, visando essencialmente as seguintes especializações: fertilização do solo; racionalização do trabalho de distribuição de fertilizantes; utilização prática dos campos de demonstração.
- * Coordenação planeada dos campos de demonstração de forma a garantir uma mais eficaz utilização dos recursos e a recolher toda a informação possível para incrementar as acções demonstrativas e retirar delas a maior eficácia.
- * Nomear um coordenador de extensão a nível central cuja acção deverá ser articulada com a de correspondentes coordenadores a nível regional.
- * Preparar um programa de divulgação do impacto do PROCALFER apoiado nos resultados obtidos nos campos de demonstração de 1981 a 1983.
- * Diversificar o âmbito dos campos de demonstração alargando a sua intervenção ao estudo de novos sistemas culturais (agrícolas e pecuárias).
- * Dar prioridade à extensão no âmbito do PROCALFER como meio de assegurar maior eficácia para o Programa, garantir o acréscimo do consumo de calcáreo e obter uma melhor utilização das instalações de fabrico e armazenagem construídas.
- * Recorrer a cursos de formação prática de gerentes de cooperativas e agricultores como forma de incrementar a aderência ao Programa e ultrapassar a retracção no consumo de calcáreo que se começa a verificar.
- * Permitir ao Grupo Coordenador maior autonomia na utilização do fundo de apoio reservado nas verbas da PL 480, para o equipamento dos serviços regionais de extensão rural (contratação de tarefeiros, viaturas, etc.)

(b.4) Investigação

Neste sector as recomendações propostas são as seguintes:

- * Estabelecimento de um plano coordenado de investigação aplicada, apoiando prioritariamente os domínios visados nos objectivos do PROCALFER.
- * Incremento das acções de investigação aplicada orientadas para intervenções que permitam aumentar a produção agrícola (novos sistemas, estudo de cultivares,

multiplicação de sementes, nutrição animal, manejo pecuário).

* Intensificar a colaboração entre estruturas de Investigação do Ministério da Agricultura e do Ministério da Educação (IUTAD), Universidade de Évora, ISA, EMV) aproveitando de forma mais racional as capacidades existentes, no apoio aos problemas do PROCALFER.

* Nomear no Grupo Coordenador um responsável por este sector (em acumulação com o da extensão) que assegure a máxima eficácia das acções a desenvolver.

* Permitir ao Grupo Coordenador utilizar os fundos da PL 480 que lhe estão consignados para financiar o plano e as acções acima referidas.

(b.5) Crédito

O sector do crédito tem sido aquele que maiores dificuldades tem criado ao desenvolvimento do PROCALFER.

As divergências de critérios de apreciação existentes entre o Grupo Coordenador e o IFADAP, a deficiente apresentação e formalização dos projectos de crédito e a burocratização excessiva na prestação de garantias e apresentação de justificativos, tem provocado atrasos substanciais na concretização de algumas acções.

Esta situação será agravada com o alargamento do crédito às acções de produção, através da aplicação das Linhas de Crédito C e D.

A resolução deste problema ultrapassa o contexto do PROCALFER e liga-se a uma ampla revisão do sistema de financiamento à agricultura, orientada para atingir objectivos (de produção) e preocupando-se menos com a sua formalização.

As principais recomendações propostas são as seguintes:

* Melhorar a articulação entre o Grupo Coordenador do PROCALFER e o IFADAP.

A forma de alcançar este objectivo será através da nomeação de um elemento do IFADAP para o Grupo Coordenador participando nas reuniões que envolvam a área do crédito.

* Regionalização das decisões de crédito, quer por parte do Grupo Coordenador quer por parte do IFADAP, delegando competências nos respectivos serviços e simplificando os circuitos administrativos.

* Revisão e concertação entre o IFADAP e o Grupo Coordenador do processamento da análise e contratação dos projectos de crédito, no sentido de tornar todo o processo mais eficaz, mais rápido e menos burocrático.

* Preparação de um "Manual de Crédito" PROCALFER a elaborar pelo IFADAP e pelo responsável pelo sector de crédito do Grupo Coordenador, que forneça aos agricultores a listagem de documentos necessários à preparação dos projectos, à sua contratação e a apresentação de justificativos.

* Assegurar cursos de formação aos técnicos de crédito dos serviços regionais do Ministério da Agricultura e aos técnicos de análise do IFADAP com vista a uniformizar critérios e conceitos, no âmbito do PROCALFER.

* Implementar acções de acompanhamento e controlo das aplicações de crédito, com instalação de sistemas de contabilidade simplificados nas empresas que recorram a maiores montantes.

* Tendo em conta o reduzido montante dos meios financeiros disponíveis para o funcionamento das linhas de crédito PROCALFER (encontram-se disponíveis apenas cerca de 1 500 000 contos) e face à disparidade existente entre as taxas de juro praticadas no SIFAP e as propostas pelo PROCALFER, proceder ao estudo de

actualização desta taxa.

* Promover à divulgação das linhas de crédito destinadas a incrementar a produção (Linhas C e D). Esta divulgação só deve ser levada a cabo depois de eliminados os estrangulamentos e deficiências apontados ao funcionamento do crédito no contexto do PROCALFER.

(b.6) Estudos

A componente estudos no PROCALFER tem sido essencialmente dirigida para a análise económica global de sistemas de produção, para estudos sectoriais e para estudos de mercado.

Embora se considere de grande utilidade esta actividade julga-se que PROCALFER não a deve executar, destinando os meios actualmente envolvidos na colaboração com os sectores de economia das universidades nomeadamente do ISA, Universidade de Évora IUTAD.

A linha de estudos deverá ser orientada para as questões de economia da produção que forneçam apoio às decisões a tomar no âmbito do PROCALFER e às acções de formação de quadros técnicos a empreender.

O Grupo Coordenador deve colaborar com o "team-leader" PROCALFER na definição dos estudos de interesse para o Programa.

(b.7) Actividades de apoio à produção

As actividades de apoio à produção devem incidir no sector das forragens e pastagens, na componente pecuária e no estudo de sistemas integrados de produção forrageiras e pecuária.

AS recomendações propostas são as seguintes:

* Considerar como actividades prioritárias a incentivar pelo Grupo Coordenador o desenvolvimento das componentes forrageiras e pecuárias.

* Articular esta actividade com a extensão rural aproveitando para demonstração os estudos a desenvolver.

* Dinamizar um programa nacional de produção de sementes forrageiras e pratenses.

* Apoiar e dinamizar estudos de produção animal nomeadamente na área dos pequenos ruminantes.

* Definir responsabilidades a nível do Grupo Coordenador e das regiões por estas actividades.

* Permitir a utilização pelo Grupo Coordenador de verbas da PL 480, para a dotação destes sub-projectos como meios humanos e materiais, necessários à realização das actividades concretas programadas.

(b.8) Coordenação

Neste sector propõe-se as seguintes recomendações para aumentar a eficiência de PROCALFER.

- * Maior ligação entre o Grupo Coordenador do PROCALFER e o Gabinete de Planeamento do Ministério da Agricultura de forma a articular as metas dos Programas de produção do MA com os do PROCALFER, e os meios financeiros afectados pelo PIDDAC.
- * Afectação de quadros administrativos e técnicos ao Grupo Coordenador, de forma a assegurar um funcionamento rápido e eficiente deste órgão.
- * O Grupo Coordenador deve ser reforçado no sector do crédito através da colaboração de um representante do IFADAP.
- * O Grupo Coordenador deve exercer o controlo e coordenação de todos os sub-projectos incluídos no PROCALFER.
- * Deve ser melhorada a colaboração entre o Grupo Coordenador e os coordenadores regionais. Seria útil que o Grupo Coordenador dispusesse de um elemento a tempo inteiro para desempenhar a função de acompanhamento e apoio local aos coordenadores regionais.
- * Deve ser aumentada a autonomia administrativa do responsável do Grupo Coordenador e dos Coordenadores Regionais.
- * O Grupo Coordenador deve centralizar o planeamento da Política de Formação de Quadros e a concessão de bolsas de estudo para o estrangeiro. Esta acção deve ser coordenada com os serviços de Extensão.
- * O Grupo Coordenador deve dispor de autonomia administrativa para utilização das verbas previstas na PL 480 para apoio da sua acção.

XII. Emphasis of PROCALFER During Next Three Years

The significant development and, at the same time, institutional bottlenecks that exist in the program leads to the general conclusion that PROCALFER should concentrate their focus on farm production during the remaining three years of the program. This new focus on Farm Production will pull together the many components of the program including soils, forage and pasture production, animal production, research, extension, credit and economics, into a focused approach to increase crop and livestock production at the farm level, taking advantage of regional autonomy and structure.

It is readily apparent that under the present structure of the Ministry of Agriculture which gives full autonomy to the Agrarian Regions and the inability of Central Services (INIA, EZN, etc) to provide technological support and backstopping to regional extension activities, that emphasis must be given to strengthening the regional production/extension system if significant advances are to be made in crop and livestock production and productivity.

PROCALFER has been successful in increasing limestone production and availability within the different agricultural regions. Regional extension activities, soil analysis, and on-farm demonstrations have shown the effects of soil acidity corrections and adequate nitrogen, phosphorus, and potassium fertilization on pasture, forage and crop production. Increases in on-farm availability of pasture and forages has, in some cases, stimulated improved and increased production of meat, milk and wool from the cattle, sheep and goat populations, while in others serving to reduce the use and dependency on feed concentrates produced from imported feed grains and protein supplements.

Unfortunately examples of the use of these improved technologies and production packages for increased production of crops, pastures, forage and livestock are few and in most cases have been implanted without the benefit of definitive production/research data, and in all cases, without the benefit of economic analysis to assure that they are economically feasible, and not only result in increased production but also in increased farm income.

During the next three years PROCALFER must build on their initial accomplishments and consolidate their efforts to bring about increased agricultural production and productivity originally envisioned as the primary objective of the program.

It is recommended that this be accomplished by building Regional Production Teams in as many regions as are interested and willing to dedicate the personnel and resources required to carry out the program. Regional resources would be supplemented by PROCALFER funds and the program would be developed and coordinated by a full-time, OICD Production/Extension Agronomist who would work with Regional PROCALFER Coordinators as counterparts.

Each Regional Production Team would be composed of a minimum of four production/extension subject-matter specialists including a soil fertility specialist, a production agronomist, animal production specialist and a farm management/production economist. Team members would be selected from among the most outstanding and promising young agronomist and animal production specialist within each region, and through short course, US study tours and constant in-service training, monitoring and backstopping by the Production/Extension Agronomist and with the additional support of short term consultants chosen to provide specific and specialised production technology and expertise, would be trained in their specialised production areas to conduct on-farm trials and farm demonstrations, and to collect production and economic data required to measure the productive and economic advantages of alternate production technologies.

This multi-disciplinary approach would focus on the principal farming systems

presently utilized within each region. Through information and data obtained from applied research and on-farm test and adaptation, the team would be able to develop improved production packages, and crop and animal systems that would provide alternate technologies that would increase farm production and income.

In addition to their responsibilities of obtaining and testing new technologies, the production team would have the additional responsibilities of training, supervising and backstopping the extension agent/personnel within the different agrarian zones. Technology transfer and support to the farmers within the agrarian zones would be the responsibility of the extension agents.

The capabilities and responsibilities of the OICD Production/Extension Agronomist is critical to the success of the program. This is based on the observation that although experimental design and field plans are generally provided from the central Coordinating Committee, adherence of these central plans and especially follow-through on data collection and reporting leaves much to be desired. This results in a significant number of demonstration plots that allow the farmer to observe the effects of lime, fertilizer and forages, but with inaccurate and incomplete data collection on yields, production problems, etc. Even when adequate production data are collected, seldom are economic data adequate for a satisfactory economic analysis ever collected.

The OICD Production Agronomist would be expected to work in the field during a significant portion of his time to assist in the design, planning and conduct of on-station and on-farm trials and demonstrations that are needed to provide appropriate and adapted technology based on existing farming systems within each region and/or agrarian zone. Where additional expertise is required within areas such as pastures, forages, crops, animal production, animal diseases, farm management, production economies, etc, he would be expected to identify this need and request short-term consultants to provide the expertise required. This would serve to focus external consultant requirements on actual crop, livestock, economic, management, credit, etc. needs instead of superimposing programs that in some cases have little relationship to local problems and needs.

He would have the additional responsibility of helping to train the subject matter specialists, and identifying and helping to organize additional training programs such as short-courses, US study tours, seminars, workshops, etc. that helps to strengthen the production teams within each region. Although this new emphasis would have national focus, it is expected that these efforts would be concentrated in the regions presently collaborating with the PROCALFER program.

To the extent possible, the institutions that compose the Central Services should be supported to conduct applied research which is directed towards the solution of regional production problems support should be provided on a project basis and should be increased, decreased or terminated on the basis of the institutes effectiveness in carrying out the planned research and their ability to produce definitive research data and results that provides adapted, improved and economic solutions to existing agricultural production problems within the regions of focus.

This increased emphasis on the strengthening of regional production team and the addition of a full time OICD production/extension agronomist must, of course, have the enthusiastic approval and full support of the Coordinating Committee. The Coordinating Committee would have the responsibility of obtaining ministerial approval and support and of stimulating regional approval and support.

XIII. APPENDIX

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PORTUGAL AGRICULTURAL PRODUCTION PROJECT EVALUATION

SCHEDULE FOR EVALUATION

SUMMARY SCHEDULE:

October 28-November 3: Lisbon

November 4-10: Northern Regions

November 11-17: Lisbon

DAY BY DAY SCHEDULE:

Sunday, October 28:

AM: Arrival Lisbon: Airport Pickup Jim Black, Check in Hotel Tivoli Jardim

5:00PM: Welcome and informal discussions, Warnken home.

8:00PM: Dinner

Monday, October 29

9:00AM: AID/Lisbon Briefing; Dr. Michael Lukomski, AID Affairs Officer

11:00AM: Political/Institutional Briefing; Ms. Mollie Iler, Agricultural Attache, USDA/FAS

12:30PM: Lunch; Evaluation Team, Eng. Almeida Alves, Coordinating Director, PROCALFER, Dr. Philip Warnken, USDA/OICD Team Leader.

2:00PM: PROCALFER Briefing; Coordinating Group

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Tuesday, October 30

AM: IFADAP: Dr. Fienup, Eng. Cary
Dr. Hanson meet with Eng. M.Carvalho in Oeiras
PROCALFER Management: Dr. Obern
DGP: Dr. Maner and Dr. Foote

PM: INIA and National Agronomic Station (EAN): Entire Team excluding
Dr. Maner.

Wednesday, October 31

AM: General Agricultural Directorate (DGA): Entire Team

PM: DGA: Entire Team excluding Dr. Hanson
2:30: Laboratory Rebelo da Silva: Dr.Hanson

Note: Schedule includes meetings with key DGA officials and Division
personnel in extension, extension publications, farm management, video
productions and training.

Thursday, November 1 (PORTUGUESE HOLIDAY)

AM: Discussions with Ms. Linda Lynch, OICD Resident Training Officer
Discussions with Dr. Luis Telo da Gama, DGP

PM: Discussions with OICD Team, Document Review, Team Meetings
Dr. Maner to field with Dr. Foote

Friday, November 2

9:30AM: Eng. Francisco Avillez:Entire Team, excluding Dr. Maner
Dr. Maner in field with Dr. Foote

2:00PM: Dr. Hanson to Quimigal, Dr. Vieira de Brito
Meetings with Ms. M.Iler and Dr. J.Luis Pinheiro at the
Embassy

5:00PM: Mark Langworthy: Dr. Fienup at Hotel Tivoli Jardim

Saturday, November 3

Open

Sunday, November 4

Entire Team Travel to Vila Real

Overnight in Vila Real

Monday, November 5

Meetings with Regional Services Officials
Field Visits (See schedule attached)

Late PM: Travel to Vila Real

Overnight in Vila Real

Tuesday, November 6

9:00AM: Discussions with University (IUTAD) officials and faculty

IUTAD Laboratory Visits

PM: Field Visits

Travel to Braga

Overnight in Braga

Wednesday, November 7

Meetings with Regional Services Officials
Field Visits (see scheduled attached)

Late PM: Travel to Porto

Overnight in Porto

Thursday, November 8

Travel to Coimbra via Aveiro

Meetings with Regional Services Officials
Field Visits (see scheduled attached)

Overnight in Coimbra

Friday, November 9

Meetings with Regional Services Officials
Field Visits (see scheduled attached)

Travel to Lisbon

Saturday, November 10

Team meeting and report writing

Sunday, November 11

Free

Monday, November 12

AM: Planning Cabinet: Dr. Fienup & Dr. Obern

3:00PM: Institute of Public Administration: Dr. Obern

Report Writing

Tuesday, November 13

AM: Team meetings and report writing

2:00PM: Eng. Dordio: Dr. Maner & Dr. Hanson

2:00PM: Eng. Jose de Oliveira: Dr. Fienup & Dr. Obern

3:30PM: Eng. Almeida Alves: Entire Team

Report Writing

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Wednesday, November 14

11:00AM: Eng. David Crespo: Dr. Maner & Dr. Hanson

Report Writing

Thursday, November 15

Team meetings
Report Writing

Friday, November 16

9:00AM Evaluation Team presentation of findings to joint meeting of
PROCALFER Coordinating Group, OICD Team, and AID/Lisbon.

PM: Report Revision and Editing

Saturday, November 17

Departure from Lisbon

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NOVEMBER 5, 1984

Monday

Visit to the Regional Directorate of Trás-os-Montes

- 9:30 - Vila Pouca de Aguiar - Meeting
- 9:45 - PROCALFER in Trás-os-Montes
- 10:10 - PROCALFER at the Agrarian Zones
- 10:30 - Discussion
- 11:00 - Travel to Boticas
- 12:00 - Visit to the local Coop

- 13:00 - Lunch

- 15:00 - Field visit: visit to one or more farmers.

NOVEMBER 7, 1984

Tuesday

Visit to the Regional Directorate of Entre Douro e Minho

- 8:30 - Hotel Turismo D. Pedro
- 9:00 - Merelim
- 11:30 - Agrarian Zone (Barcelos)
- 15:00 - Field visit: visit to one farmer (Barcelos).
- 17:00 - Visit to a Coop in Vila do Conde.

NOVEMBER 8, 1984

Thursday

Visit to the Regional Directorate of Beira Litoral

- 8:00 - Leave Porto
- 9:00 - ALBERGARIA (Leave the Highway - Volvo Stand)
The Regional Coordinator will be waiting for us.
- 9:30 - Oliveira de Frades
Agrarian Zone - Extension (Sub-Regional Coordinator)
- 11:30 - Oliveira de Frades Coop

- 13:00 - Lunch

- 15:00 - Viseu Agrarian Zone - Demonstration Plots.
Visit to a farmer

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NOVEMBER 9, 1984

Friday

Beiral Litoral Region

- 9:00 - Coimbra: Regional Director, Director of Extension DP., Regional Coordinator.
- 10:00 - Gandaras Agrarian Zone (Figueira da Foz)
- 13:00 - Lunch
- 15:00 - Management Team & Visit to a farmer
- 16:00 - Visit to a local Coop

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ADMINISTRATION AREAS - DISTRICTS -



AREAS VISITED

THIS GUIDE TELLS YOU ABOUT:

"A B C OF PORTUGAL": BEACHES SPAN PICTURESQUE TOWNS FORTIFED MARKS CHURCHES MONUMENTS CASTLES CASTLES AND ARCHITECTURE ETHNOLOGY MUSEUMS OFFICIAL TOURIST OFFICES, by regions: "COSTA VERDE"; "COSTA DE PRAIA"; MOUNTAINS; "COSTA LINDA"; PLAINS; ALGARVE; AZORES and MADEIRA (pages 1 to 4) CITY OF LISBOA (pages 5 to 10) OTHER TOWNS (pages 11 to 14) ART GALLERIES THEATERS (page 15) "SHOPPING" (pages 16 and 17) ROSSING AROUND (pages 18 to 21) CITY OF LISBOA (pages 22 and 23) LISBON SIGHTSEENING (page 24) NIGHTSIGHTING AND EXCURSIONS (page 25) AIRLINES (page 26) RAIL SERVICES (page 27) EMBASSIES AND CONSULATES (page 28) TOURIST INFORMATION (pages 29 to 31) TRAVEL AGENCIES (page 32) TRANSPORT (page 33) CAR HIRE (page 34) PARKING (page 35) BANKS (page 36) CHAMBERS OF COMMERCE (page 37) CAMPS (pages 38, 39, 40 and 41) "SPORTS" (GOLF COURSES AND SWIMMING POOLS) (page 42) HEALTH SERVICES (page 43) TELEPHONE AND TELEGRAMS (page 44) SUNDRY (LISBON) (page 45) (LISBON) (pages 46 and 47) TOURIST OFFICES ABROAD (page 48) UNITED WORKERS (page 49) HOTELS, GUEST HOUSES, AND BOARDING HOUSES RESTAURANTS TEA ROOMS BARS NIGHT CLUBS DANCING TYPICAL RESTAURANTS (LISBON AND VISITORS) (pages 50 and 51) (LISBON AND VISITORS) (page 52) F.T.C.

"NOTES"

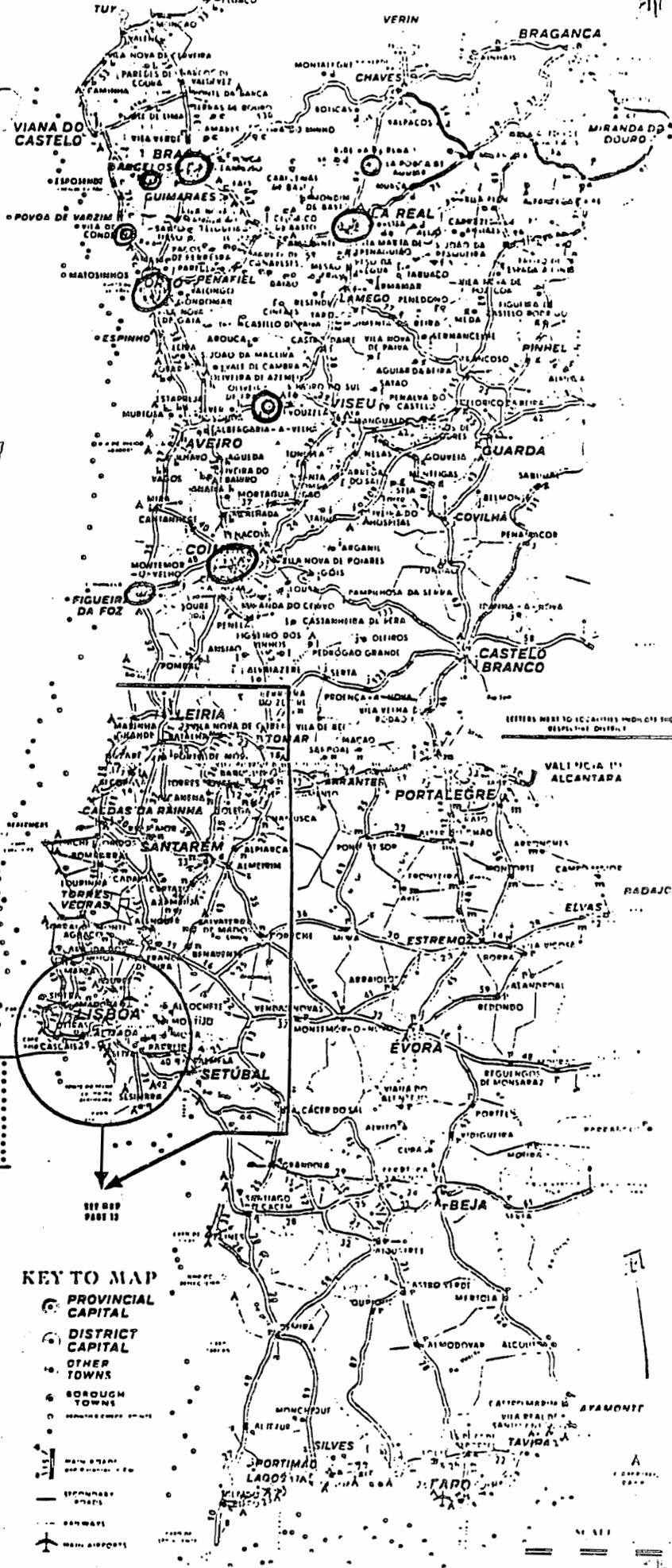
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KEY TO MAP

- PROVINCIAL CAPITAL (circle with dot)
- DISTRICT CAPITAL (circle with dot)
- OTHER TOWNS (circle)
- BOURGEOIS TOWNS (circle)
- RAILWAYS (line with cross-ticks)
- STRADA (line with cross-ticks)
- AIRPORTS (circle with airplane)

RESTAURANT

A

EVALUATION TEAM'S MEETINGS

PROCALFER COORDINATING GROUP

October 29, 1984

Eng. Almeida Alves - Coordinating Director
 Eng. A. Dordio - Forager
 Eng. L. Mendes - Forager
 Eng. M. Monteiro - Extension
 Eng. R. Azevedo - Research
 Eng. Victor Oliveira - Limestone
 Eng. J. Oliveira - Credit
 Eng. S. Goncalves - Management

MEETING WITH PARTICIPANTS OF THE
NATIONAL SHEEP AND GOAT IMPROVEMENT PROGRAM

October 30, 1984

Dr. Teixeira de Sa	DGP (Extension)
Eng. Jose Lopes Castro	Alter do Chao
Dr. Jose Marcelino Tavares	Alter do Chao
Dr. Renato da Silva Carolino	Alcacer do Sal
Dr. Graca Ferreira Dias	Castelo Branco
Dr. Pedro Simoes	Venda Nova
Dr. Luis Filipe Potes	Venda Nova
Dr. Ovidio Nelson Rodrigues	Macedo de Cavaleiros
Luis Aires Mateus	DRAA/Algarve
Mario Costa	DRAA/Algarve (Paul)
Dr. Edgar Correia	DRAA/Algarve
Dr. Henrique Sales Henriques	DRARO
Eng. Manuel Sacramento Lopes	DRTM
Dr. Jose Luis Cabral de Almeida	DRBL/Tondela
Dr. Jose Bettencourt	Aboboda
Dr. Carlos Manuel Bettencourt	Aboboda
Eng. Maria Antonia M. Cruz	DRTM/Mirandela
Eng. Claudino Matos	Aboboda
Dr. Marcelino Sobral	DGP
Dr. Luis Telo da Gama	DGP
Dr. Carl L. Hausler	Consultant
Dr. Warren Foote	Consultant
Dr. Jerome Maner	PROCALFER Evaluation Team
Dr. Philip F. Warnken	PROCALFER, OICD Team Leader

VISIT WITH EXTENSION (DGA)

October 31, 1984

Ilidio Lourenco	- Director General of Agriculture
Manuel Monteiro	- Extension Procalfer
Alice Gabriela Gamito	- Agronomist - Information
Marilia Sousa Vale	- Agronomist
Mario Ginote	- Agronomist
Maria Albertina Lobo	- Agronomist - Video
Antonio Giraldes	- Consultant (Brasil)

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LABORATORY REBELO DA SILVA

October 31, 1984

Jose Cardoso Soveral Dias - Agronomist
 Arlete Domingues dos Santos - Agronomist
 Maria Guilhermina Nogueira
 Antonio Videira da Costa

MEETING OF EVALUATION WITH COORDINATOR OF
 NATIONAL SHEEP AND GOAT PROGRAM

November 1, 1984

Dr. Luis Telo da Gama
 Dr. Warren C. Foote
 Dr. Philip F. Warnken

DGP
 Consultant
 OICD Team Leader

MEETING JHM WITH SHEEP AND GOAT TEAM
 Alcacer do Sal

November 1, 1984

Dr. Carlos Fontes
 Dr. Renato da Silva Carolino
 Dr. Warren Foote
 Dr. Luis Telo da Gama

Director General DGP
 DGP, Alcacer do Sal
 Consultant
 DGP/NSGIP Coordinator

MEETING WITH PERSONNEL AT ABOBODA NSGIP

November 2, 1984

Dr. Antonio Jose Bettencourt

 Dr. Carlos Manuel Bettencourt
 Eng. Caudino Matos
 Dr. Luis Telo da Gama
 Dr. Warren Foote

M.V. Director da Estacao Regional
 do Fomento Pecuario do Baixo Alentejo
 Herdade da Aboboda
 Aboboda
 Aboboda
 DGP
 Consultant

QUIMIGAL

November 2, 1984

Alvaro Ruiz Pimenta de Castro - Chief, Agricultural Regions
 Antonio Carlos da Gama Dias Coelho - Seeds
 Antonio Vaz Milheiro - Soil Testing and Recommendations
 Pimenta de Castro - Soils Laboratory

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AGRICULTURAL REGION 2

November 5, 1984

Dr. Antonio Sampaio	- Regional Director
Eng. Jose M. Cardoso	- Director Planning Cabinet
Eng. Fernando Madureira	- Director of Rural Extension
Eng. Maria do Rosario Lage	- Chief, Extension Assistance
Eng. Augusto Lage	- PROCALFER Regional Coordinator
Eng. Maria da Graca Madureira	- Zone of Alvao/Padrela
Eng. Maria Helena Sarmento	- Zone of Alto Tamega
Vet. Avideo Nelson Rodrigues	- Poultry
Maria Adelaide Fernandes	- Program Management
Eng. Mota	- Forest Service
Sr. Manuel Simoes	- Representative of CORCOOP
Sr. Gualter Crisostomo	- Representative of CORCOOP

INSTITUTO UNIVERSITARIO DE TRAS-OS-MONTES E ALTO DOURO

November 6, 1984

Dr. Fernando Nunes Ferreira Real	- Reitor
Eng. Joao Coutinho	- Soils Laboratory
Eng. Arnaldo Silva	- Agronomist
Dr. Torres Pereira	- Plant Breeding

AGRICULTURAL REGION 1.

November 7, 1984

Eng. Jose Julio Trigueiro	- Regional Sub-Director
Eng. Manuel Jose de Almeida	- Director of Regional Agr. Services
Eng. Antonio Fernando da Silva	- Forage Section
Eng. Abel Nogueira	- Agriculture Development

AGRICULTURE RREGION 3.

November 8, 1984

Eng. Eduardo A. Ramalheira	- Chief Division
Eng. Luis Teles Grilo	- Regional Coordinator
Eng. Jose Gamelas Garces	- D.S.E.R.
Eng. Leonel Vieira Amorim	- DRBL Management of PROCALFER

AGRICULTURE REGION 3.

November 9, 1984

Eng. Francisco Ramos de Moura	- Regional Director
Eng. Luis Teles Grilo	- Regional Cordinator
Eng. Eduardo Ramalheira	- Chief, Agr. Production Division
Eng. Jose Gamelas	- Director, Rural Extension Services
Eng. Leonel Amorim	- PROCALFER Management Specialist

(2)

PLANNING CABINET

November 13, 1984

Eng. Adilio Corvo	- Sub-Director of Planning Cabinet
Dra. Elvira Hugon	- Chefe of Program Division
Eng. Jaqueline Soulier Oliveira Sa	- European Technical Division
Eng. Edite Azenha	- Technical Program Division
Eng. Jorge Santana	- European Technical Division
Eng. J. P. Silva Carvalho	- European Technical Division
Eng. Armando Sevinato Pinto	- Planning Cabinet MAFA

MEETING OF JEROME MANER WITH DGP

Dr. Carlos Fontes	Director General DGP
Dr. Luis Telo da Gama	DGP

OTHER CONTACTS

Eng. Eduardo A. Ramalheira	- DRABL. Head, Production Division
Eng. David Crespo	- Forage Research , Elvas
Eng. Mario de Carvalho	- Statistics
Dr. Eugenio Sequeira	- Head, Soils Department, EAN
Dr. Francisco Avilez	- Agr. Econ. University of Lisboa
Dr. Warren Foot	- Utah State University
Dr. James Ahlrichs	- Purdue University
Eng. Mendes Gaspar	- INIA
Dra. Odette Tavares	- IFADAP

PRINCIPAL MATERIAL REVIEWED BY TEAM

Near East Bureau Evaluation Guidelines - August 1984

Project Paper

PIO/T

PASA Agreement

1981 and 1983 PES

Grant Agreement

Plan of Work

AID Staff Trip Reports

Various Consultant Reports

PROCALFER Project Reports

PROCALFER Evaluation Briefing Book

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PORTUGAL AGRICULTURAL PRODUCTION PROJECT LOCAL & PASA
OBLIGATIONS IN SUPPORT OF PROCALFER
FY 81 + 82 + 83 + 84

SUB-PROJECT	1981		1982		1983		1984		TRAINING PIOP	TOTAL LOCAL	% PROG. COSTS	TOTAL PASA	% PROG. COSTS
	LOCAL DISB.	PASA OBLIG.	LOCAL DISB.	PASA OBLIG.	LOCAL DISB.	PASA OBLIG.	LOCAL DISB.	PASA OBLIG.					
01 PROJ.MGHT.ADMIN & DESIGN	93119	180700	69026	161100	140629	185100	79733	212074	0	382507	-	738974	-
02 LIMESTONE PROD./T/D	0	44100	0	90900	0	28062	2370	67952	43162	2370	1	231014	7
03 SOIL ANALYSIS	0	91000	0	37200	2558	12747	341	8947	0	2899	1	149894	5
04 FORAGE PRODUCTION	0	0	0	0	0	22971	2112	42791	44240	2112	1	65762	2
05 EXTENSION	0	19800	49824	10400	1262	3952	49192	34339	21700	100278	46	68491	2
06 FARM PRACTICE/SYSTEMS	0	0	0	78400	617	155167	15152	98262	0	15769	7	331829	11
07 AGRICULTURAL RESEARCH	0	0	0	0	0	0	5463	4458	0	5463	3	4458	0
08 AGRICULTURAL CREDIT	0	0	0	26600	137	37864	3030	0	0	3167	1	64464	2
09 POLICY & ECON.STUDIES	0	120900	0	237600	29929	134592	7218	373135	0	37147	17	866227	28
10 ANIMAL PRODUCTION	0	26200	0	10200	12429	170260	93	93528	40800	12522	6	300188	10
11 AGRICULTURAL MARKETING	0	0	0	36500	0	149546	0	63075	0	0	0	249121	8
12 FIMS	0	22300	0	120300	7274	146874	7304	10009	53612	14578	7	299483	10
13 TRAINING DESIGN	0	9278	0	91300	0	189744	21175	179648	0	21175	10	469970	15
** TOTAL PROGRAM COSTS	0	333578	49824	739400	54206	1051779	113450	976144	203514	217480	100	3100901	99
** RECONCILING ITEMS	-	-	17268	-	3368	-	-	-	-	20636	-	-	-
** NOT CLASSIFIED	-	-	-	-	-	-	-	1409	-	-	-	1409	-
** OVERHEAD	-	128570	-	225125	-	309220	-	422887	-	-	-	1085802	-
PROJECT TOTAL *****	93119	642848	136118	1125625	198203	1546099	193183	1612514	203514	620623	-	4927086	-
TOTAL COST/YEAR *****		735967		1261743		1744302		2009211		FY81-84 *****		5547709	

PROG. NAME : L+P-1-4
UPDATED : 11/18/87

PORTUGAL AGRICULTURAL PRODUCTION PROJECT LOCAL & PASA
OBLIGATION IN SUPPORT OF PROCALFER
FY 84 + FY 85

SUB-PROJECT	1984			1985			TOTAL LOCAL	% PROG. COSTS	TOTAL PASA	% PROG. COSTS	TOTAL TRAINING	% PROG. COSTS
	LOCAL DISB.	PASA OBLIG.	TRAINING PLOP	LOCAL DISB.	PASA OBLIG.	TRAINING PLOP						
01 PROJ.MGMT.ADMIN & DESIGN	79733	212074	-	134000	219524	-	213733	-	431598	-	-	-
02 LIMESTONE PROD./T/D	2370	67952	43162	3000	112000	0	5370	2	179952	10	43162	5
03 SOIL ANALYSIS	341	8947	0	300	70000	103500	641	0	78947	4	103500	12
04 FORAGE PRODUCTION	2112	42791	44240	42500	75000	75000	44612	20	117791	6	119240	14
05 EXTENSION	49192	34339	21700	6000	41000	285000	55192	25	75339	4	306700	35
06 FARM PRACTICE/SYSTEMS	15152	98262	0	5300	125000	0	20452	9	223262	12	0	0
07 AGRICULTURAL RESEARCH	5463	4458	0	2200	30000	65000	7663	3	34458	2	65000	7
08 AGRICULTURAL CREDIT	3030	0	0	0	65000	45000	3030	1	65000	3	45000	5
09 POLICY & ECON.STUDIES	7218	373135	0	5000	175000	0	12218	5	548135	29	0	0
10 ANIMAL PRODUCTION	93	93528	40800	500	70000	102500	593	0	163528	9	143300	16
11 AGRICULTURAL MARKETING	0	63075	0	0	10000	0	0	0	73075	4	0	0
12 PIMS	7304	10009	53612	10000	30000	0	17304	8	40009	2	53612	6
13 TRAINING DESIGN	21175	179648	0	34000	102312	0	55175	25	281960	15	0	0
** TOTAL PROGRAM COSTS	113450	976144	203514	108800	905312	676000	222250	100	1881456	100	879514	100
** RECONCILING ITEMS	-	-	-	-	-	-	-	-	-	-	-	-
** NOT CLASSIFIED	-	1409	-	-	-	-	-	-	1409	-	-	-
** OVERHEAD	-	422887	-	-	281209	-	-	-	704096	-	-	-
PROJECT TOTAL *****	193183	1612514	203514	242800	1406045	676000	435983	-	3018559	-	879514	-
TOTAL COST/YEAR *****		2009211			2324845		FY84-85 *****		4334056			

PROG. NAME: LTP-4-5
UPDATED: 7/11/84

PROJECT DESIGN SUMMARY
LOGICAL FRAMEWORK

Life of Project:
From FY 1980 to FY 1985
Total US Funding \$10 million
Date Prepared: 8/16/80

Project Title & Number: Agriculture Production Program 150-0023

BEST AVAILABLE COPY

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	IMPORTANT ASSUMPTIONS
<p>Program or Sector Goal: The broader objective to which this project contributes:</p> <p>Program or Sector Goal: Increased agricultural production and productivity.</p> <p>Sub Goals: Prepare for entry into the European Economic Community in a manner which minimizes possible negative economic effects for Portugal's agric. sector.</p>	<p>Measures of Goal Achievement:</p> <ul style="list-style-type: none"> - Increased productivity, especially at the small farm level. - Increased agricultural production - Reduction of imports of food, foodstuffs, and agricultural products. - Increased incomes of small farmers. 	<ul style="list-style-type: none"> - Visits to farmers. - Statistics (INIA, DGER, Coops, etc.) - MAP Surveys. - Trade Balance Accounts. 	<p>Assumptions for achieving goal targets:</p> <ul style="list-style-type: none"> - Farmers participate fully. - MAP program develops on schedule with continued GOP support. - Necessary structural changes are introduced into the economy. - Economic policy constraints are identified and eliminated or reduced. - Private investment in agriculture increases. - Agriculture policies will be in effect which prov. incentive, encourage production.
<p>Project Purpose:</p> <p>Strengthen and support MAP institutions responsible for meeting objectives of Ministry's agricultural Production Program.</p>	<p>Conditions that will indicate purpose has been achieved: End of project status.</p> <ul style="list-style-type: none"> - A central MAP planning unit capable of analyzing/monitoring/formulating policy recommendations. - Approved GOP agriculture sector strategy coordinating public/educ. private institutional efforts. - Regional programs of agricultural dev. approved and being implemented in at least four regions. 	<ul style="list-style-type: none"> - GOP annual ag. production statistics - Farm level statistics - Observation and farm visits - Observation and visits to Regional Offices - Soil test results - Demonstration plot results - "Demonstration Kits" compared to actual practices. 	<p>Assumptions for achieving purpose:</p> <ul style="list-style-type: none"> - Farmers interested in increasing productivity - Regional Offices adequately staffed
<p>Output: - Approved regional ag. dev. plans</p> <ul style="list-style-type: none"> - Demonstrations of lime and fertilizer use and improved forages prod. practices. - Trained extension agents. - Farm systems research being conducted which relates to the small farmers. - On-farm applied research being conducted - Limestone available to all farmers - Trans. study compl. for movement of ag. c. - Inc. capac. and equip. of soil test labs - Seed proc. lab estab'd and operational. - Participants (and in selected sub. areas) 	<p>Magnitude of Outputs:</p> <ul style="list-style-type: none"> - At least 4 regional plans being implemented. - Over 100 demons. conduct'd yearly - Over 90% of all extension agents having rec'd special or on-the-job training. - Farm systems and farm mgmt. res. added to research priorities of at least one research fac. in each region. - On farm ap. res. cond. at 3 loc./yr. 	<ul style="list-style-type: none"> - USDA Reports - Visits to MAP Regional Offices - Visual inspection of "Demon. Kits" - Farm visits - Farm level statistics - Observation of soil labs/test fields - Visits to Reg. Insts. (i.e. Banks, Coops, etc.) - Visits to limestone companies - Review of disbursement request doc. under loan 	<p>Assumptions for achieving outputs:</p> <ul style="list-style-type: none"> - Farmers receptive to Research/Extension outreach program. - Research personnel receptive to "applied/field" research - Limestone produced on schedule - Credit programs are utilized.
<p>Inputs:</p> <ul style="list-style-type: none"> - Consultant and Instructor Services - Participant Training - Research Equipment - Livestock and Semen - Seed Processing Center - Seed - Demonstration Supplies/Materials - GOP Counterpart Admin Equip/Materials 	<p>Implementation Target (Type and Quantity) (\$000)</p> <ul style="list-style-type: none"> US\$10 million 341 per/mo (\$3,625.0) 560 per/mo short-term (3,155.8) 636 per/mo long-term (\$1,679.7) (30 part.) 465,000 165,000 585,000 35,000 <p>(US\$ equiv - 4.5 mil. see Financial Plan)</p> <ul style="list-style-type: none"> \$3,325.0 750.0 425.0 	<ul style="list-style-type: none"> A.I.D. - USDA PASA arrangement (5 year) - Voucher review - Country clearance procedures - USDA reports Visits to MAP Regional Offices Signature of Project Agreement USDA Reports (Joint Evaluation Reviews) GOP Budget 	<p>Assumptions for providing inputs:</p> <ul style="list-style-type: none"> - MAP institutional structure absorbs TA services - MAP decentralization proceeds effectively carried out.

STATE & LOCAL EXPENDITURES

STATE	LOCAL	TOTAL	PERCENTAGE
93,119	642,848	735,967	100.0
136,118	1,125,625	1,261,743	100.0
198,203	1,546,099	1,744,302	100.0
193,183	1,612,514	1,805,697	100.0
203,514		203,514	100.0