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AGRICULTURAL PLANNING PROJECT
YEAR 3 and Year 4 REPORT

Contract No. LAC-0061-C-00-1003-00
ALNA No. 201

Submitted to

Mr. Julio Sloshtower, Deputy Director
Mr. Cyril Buchanan, Project Manager
U.S. Agency for International Development
US/AID Mission to Jamaica
2 Oxford Road
Kingston 5, Jamaica

Submitted by

A. L. Nellum and Associates, Inc.
1900 L Street, N.W., Suite 405
Washington, D.C. 20036

Contact Person

Mr. Bruce A. Petty
Executive Vice President

June 30, 1984



A. L. NELLUM AND ASSOCIATES

A. L. NELLUM AND ASSOCIATES

1900 L STREET, N.W.
WASHINGTON, D.C. 20036
202-862-9300
TELEX 440617 ALNA UI

June 30, 1984

Mr. Julio Sloshtower
Deputy Director
U.S. Agency for International Development
US/AID Mission to Jamaica
2 Oxford Road
Kingston 5, Jamaica

Attention: Mr. Cyril Buchanan, Project Director

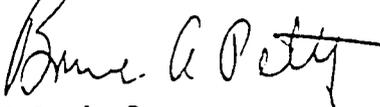
Re: Agricultural Planning Project
Contract No. LAC-0061-C-00-1003-00
ALNA No. 201

Dear Mr. Sloshtower:

A. L. Nellum and Associates, Inc. (ALNA) is pleased to submit three (3) copies of this Annual Report for 1983 and 1984 to the referenced contract. The Report addresses the activities, accomplishments and constraints of the project during the reporting period and sets forth a series of recommendations for future activities which will serve to further the goals of the Agricultural Planning Project (APP).

On behalf of the entire team of APP specialists, let me express my appreciation for the opportunity to participate in this important project. Please let me know if you have questions or require further information.

Sincerely,


Bruce A. Petty
Executive Vice President

Enclosures

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1.0 EXECUTIVE SUMMARY

A. L. Nellum and Associates, Inc. (ALNA) is pleased to submit this annual report for the period from January of 1983 through May of 1984 of our contract to provide technical assistance to the Agricultural Planning Project (APP) of Jamaica's Ministry of Agriculture (MOA). The Report consists of four major sections:

- Section 1.0, Executive Summary, highlights the accomplishments, problems and recommendations presented in the report.
- Section 2.0, Project Implementation, summarizes the goals, activities and events of the contract during its third year of operation.
- Section 3.0, MOA's Accomplishments, describes the progress of the Ministry of Agriculture in achieving APP goals during the third contract year.
- Section 4.0, Project Implementation, Problems and Recommendations, delineates the constraints and barriers encountered by ALNA's technical assistance team during the reporting period, and our recommendations for their resolution.

1.1 Technical Assistance Contract Goals for the Reporting Period

The Agricultural Planning Project was developed by the Ministry of Agriculture and US/AID to effectuate the increased efficiency of the island's agricultural development system and its activities through appropriate technology transfer. Aimed primarily at increasing the standard of living of the rural Jamaican population, the APP has as its primary goals:

- to ensure that agricultural land is retained and used efficiently;
- to create increased opportunity for agro-industrial and small business enterprises, thus reducing the unequal distribution of capital and economic activity between rural and urban areas;
- to increase the production of food and agricultural products, thus meeting Jamaican food and nutrient requirements, increasing the export of traditional crops and developing new exports, and,
- to restructure Jamaica's agricultural production system to reverse the nation's growing reliance on imported commodities.

In designing the project, US/AID and the MOA recognized that the Ministry would require a range of technical assistance services to overcome shortages in skills, personnel, management and information systems. As a result, ALNA was selected to provide technical assistance to MOA. The



specific goals of the technical assistance effort for the final seventeen months of the contract were:

- To provide technical input and process support to the completion of MOA's Five Year Plan;
- To complete the design of the MOA's Library Information System;
- To design procedures and provide support in upgrading the Ministry's automated data processing, storage and analysis capabilities;
- Consultation and direct assistance in the assessment, design and delivery of skills training needed by MOA staff;
- Participation in design and conduct of research studies and projects; and,
- Management of the contract to ensure maximum contribution to the goals of the APP.

A big milestone for the APP was the development of a comprehensive Five-Year Plan for the Ministry. Originally scheduled for completion during the first year of the project, the plan was delayed by shifting priorities, unavailability of needed resources, and the slowness of the review process. As a result, the primary focus of ALNA's assistance during year three of the contract was the encouragement of planning as a continued high priority within the Ministry, and the transfer of the skills and technology necessary to completion of the Plan.

1.2 Third Year Accomplishments

During the final seventeen months of the project, ALNA personnel and consultants successfully accomplished the goals set forth for the last phase of technical assistance effort. In doing so they provided 670 persondays of long-term assistance and 231 persondays of short-term advisor support to the APP. A summary of the activities and accomplishments of these personnel includes:

- The Team Leader served as liaison with the Rural Development Officer of US/AID and the Ministry. In that capacity she served as an advocate for the APP throughout the MOA, playing an advisory role on both process and content for the development of the Five-Year Plan. She served as a coordinator among MOA Divisions and Branches, preventing duplication of effort and reinforcing the centralized planning system of the Ministry.
- The Training Advisor (who also served as Team Leader) advised the Training Division on the development of its Master Training Plan, assisted in the design and delivery of training courses, and participated in the development of a Skills Inventory System for the Ministry. She also assisted in

identifying appropriate placements for U.S.-based training of MOA staff, and in the development of MOA training schedules and course outlines.

- The Systems and Programs Advisor provided technical assistance and consultation in the areas of development, management and utilization of the Ministry's data processing capabilities, focusing on plans for the installation and use of the new IBM System/38 computer. He also developed software for use in nationwide agricultural surveys and provided training in a variety of systems design and documentation skills.
- The Data and Policy Advisor provided input and coordination assistance to the development of the Five-Year Plan, the completion of which marks a major milestone for the APP. This advisor worked with the Ministry to obtain and incorporate the ideas of over 100 of Jamaica's most outstanding agriculturalists into the Plan, in addition to drafting issue papers and sections of the Plan on a range of agricultural planning and policy issues.
- The Survey Methods Advisor focused on the redesign of the MOA's quarterly Crops Production Survey which was discontinued in 1980. He prepared proposals on revisions of area frames, sample selection and development of survey materials. He also prepared recommendations on coverage evaluation of previous surveys and provided assistance to MOA staff as needed.
- The Library Systems Advisor worked with MOA to develop overall conceptualization for the Ministry's Library Information System and Learning Resource Center. In this process he developed a detailed management plan for the implementation of the Information System, and designed training plans to assist MOA staff in efficient use of these resources.

1.3 Problems and Recommendations

The problems encountered by the APP since its inception have been serious and costly, and it is to the credit of both the staff of the MOA and ALNA's advisors that significant progress has been made despite these barriers. It is also a positive reflection on the project that a number of specific recommendations have been developed to assist MOA in addressing these problems.

1.3.1 Problems

The most critical problem encountered by the APP has continued to be a lack of action-oriented priority for the project within the Ministry, and a corresponding dearth of resources applied to APP activities. This problem is fairly easy to understand when viewed in the context of a national agricultural policy agency experiencing a marked increase in demands concurrent with high staff turnover and sometimes inadequate



funding. At such times, planning seems to be a costly luxury rather than a solution to immediate problems.

The specific barriers to APP implementation which ALNA has identified are summarized below:

- Inadequate definition and communication of priorities within the Ministry, resulting in confusion, unilateral decision-making and mismanagement of resources. This also results in a lack of coordination among the Ministry's functional divisions.
- Poor management of, and planning for use of, technical assistance resources, resulting in advisors spending time on inappropriate administrative tasks, working without the availability of counterparts, and addressing un-doable scopes of work because of lack of equipment and other material resources.
- A continued high turnover among MOA staff, resulting in both costly vacancies in critical positions and the loss of skilled and highly trained human resources. This problem poses a serious threat to the institutionalization of the APP.
- Lack of availability of data needed for effective planning, because human and material resources allocated to data collection and analysis have not kept pace with the schedule of the planning process.
- Increased demand for information, exceeding the projections of the original APP planning document, causing further delay as equipment and staff are upgraded to address the unexpected needs.
- Resistance to centralization of staff training functions, resulting in continued fragmentation of staff development, duplication of effort and confusion as to accountability and responsibility.
- Lack of centralization of the APP as a whole, causing serious delay in the development of the Five-Year Plan because of the time spent in coordinating a range of independent planning activities.
- Need for managerial training for MOA staff, most of whom have technical training but lack skills in such areas as planning, resource allocation, supervision, and evaluation.

1.3.2 Recommendations

One of the major outcomes of the APP technical assistance effort was a series of recommendations developed to promote the continued

usefulness of planning and evaluation throughout the MOA. Highlights of these recommendations include:

- The institutionalization of the Five-Year Plan as a feasible management tool should become a high priority throughout the Ministry.
- The Ministry should adopt a policy which calls for specific planning for use of all human and fiscal resources provided through assistance efforts.
- The Ministry, and the Government of Jamaica in general, should examine revisions to the personnel system to permit the Government to become competitive with the private sector in attracting and retaining qualified professional;
- Training should be provided to all Ministry managers in the planning and evaluation skills which will enable them to make maximum use of the Five Year Plan. This training should be followed by effective accountability procedures which require MOA managers to apply planning techniques in the exercise of their duties;
- In recognition of the long term nature of formal solutions to its manpower problem, the Ministry should identify key staff positions and develop consultancies to fill them with the most qualified people;
- MOA should provide extensive training to staff in the use of computer hardware and software within the context of the Ministry's need and resources;
- Both MOA, automation and training functions should be centralized within the Data Bank and Evaluation Division and the Training Division respectively, to ensure adequate coordination an defficiency of these functions;
- The quarterly Crops Production Survey should be reinstated, using revised sampling frames and survey techniques;
- The Five-Year Plan should become the foundation for an annual "roll over" planning process to ensure continuation of long-term planning within the Ministry.

Our final, and most basic, recommendation is our recognition of the need for continued support and assistance to the MOA in its planning and information processing activities. In a sense, the Ministry is now entering the most critical phase of the Agricultural Planning Project--the use of the Five-Year Plan as a vital and effective total for the continued economic development of the island. The original APP design recognized the need for assistance in the application and on-going development of the planning process once the Five-Year Plan was completed. That need is no less critical because the Plan's completion was delayed--in fact, it may be stronger.



We are, therefore, recommending that US/AID continue contract technical assistance to the APP to ensure that the investments of the past 3 1/2 years result in accomplishment of overall project goals.

2.0 PROJECT IMPLEMENTATION

In this section, we summarize goals and objectives as they generally apply to the overall agricultural planning project and as we specifically planned and responded to them during the last seventeen months of our contract. Our plans and responses to these goals and objectives are in terms of staff organization, utilization and staff activities. In this regard, we examine and make recommendations regarding scope of work accomplishments, and constraints experienced as we implemented our plans and strategies for the accomplishment of both contract and Ministry goals and objectives.

2.1 Agricultural Planning Project Implementation Goals

The Agricultural Planning Project (APP) was designed specifically to help the Government of Jamaica (GOJ) and Ministry of Agriculture (MOA) to achieve their goals by providing hardware and effectuating appropriate technology transfer.

USAID's aim in funding the APP was to assist the GOJ in the accomplishment of the following goals:

- To increase rural incomes and improve rural amenities and social infrastructure as a basis for raising the standard of living of the rural population;
- To ensure that all agricultural land is retained and used in as efficient a manner as possible;
- To create agro-industrial and small enterprise opportunities in rural areas to reduce the unequal distribution of capital and economic activity between rural and urban areas;
- To produce as much food and raw material as is economically feasible to meet domestic food and nutrient requirements, to increase exports of traditional crops, and to develop new crop exports; and
- To structure agricultural production to reverse the growing reliance on imported commodities.

US/AID planned to assist the GOJ in analyzing and responding to changing problems of the small farmers, in maintaining gains made in productivity, and in developing technological responses and policies in the rural sector. AID recognized that the assistance needed by the GOJ would be to help overcome shortages in skills, personnel, management, and business acumen, in addition to overcoming shortcomings in the GOJ's ability to prepare and implement projects.

Consequently, USAID contracted with A. L. Nellum and Associates, Inc., to provide in 3-1/2 years, 90 person months of technical assistance to the Ministry of Agriculture in the following areas:



- training and technical assistance which would result in MOA's having additionally trained permanent staff professionals and satisfactorily upgraded capabilities of other existing professionals;
- computer systems and programming training and technical assistance which would result in an increased, permanent data handling capacity through computer availability, data storage and retrieval capacity and trained personnel to maintain and operate the system;
- data and policy analysis assistance to increase the Ministry's capacity to develop and implement long and short term planning;
- survey methods to increase this capability and capacity to collect and analyze data and information pertinent to decision making;
- evaluation methods assistance to enhance the capability of the MOA to develop and implement evaluation systems for the APP and to increase the Ministry-wide capacity for planning and evaluation;
- library systems assistance to develop plans and strategies for managing the abundance of information required by the various entities and individuals for planning and decision making;
- audio-visual aids assistance to enhance the training of staff and the communication of data and information within and outside of the Ministry.

Accomplishments in the aforementioned areas have been presented in our years one and two annual reports. Goals and objectives begun, not completed, or not addressed during the first two years, plus, the goals originally seen for implementation during the third year of the project formed the basis for the establishment of goals for the third year.

Several underlying themes developed during ALNA's year three technical assistance activities. In response to the constraints and problems encountered during our first two years of project operation, we focused our third year efforts on encouraging and assisting the Ministry to establish and institutionalize long-range planning, and the APP, as a critical operational priority. This involved an on-going collaborative effort to identify both the benefits of planning and the costs of non-planning within the framework of the MOA's mandate.

ALNA's technical assistance team also focused on assisting MOA in the management of information within its various divisions, especially as it related to planning, intra-agency communication and decision-making. Thus, much of the effort of year three involved transferring to MOA staff the technology and capabilities to enable and motivate Ministry personnel to

utilize information within the context of an effective long-range planning process.

Specific goals for the third year of the APP technical assistance effort included:

- Completion of the MOA's Five-Year Plan;
- Completion of the design of the Library Information System;
- Upgrading of the hardware, software and staff capabilities of the Ministry' electronic data processing and analysis capabilities to bring them more in line with current and projected informational requirements;
- Provision of consultation in the design and delivery of skills training for MOA staff and an assessment of training needs;
- Development of studies and survey results on a range of research and forecasting issues, focusing especially on the revision and reinstatement of a quarterly crops production survey; and,
- Management of the APP technical assistance contract to assure that advisors maximally contributed to the goals of the APP, that APP activities were coordinated throughout the Ministry and with USAID, that a balanced agricultural planning capability results from the APP, and that the contract remained responsive to changing needs.

In the following sections, we present the organization of the technical assistance team and how the team was utilized for the accomplishment of these goals.

2.2 Implementation Team for Year Three

In this section, we discuss the APP implementation team in terms of its organization, utilization and placement within the Ministry of Agriculture. Two exhibits appear in this section. The team organization chart (Exhibit 2-1) shows reporting and support protocol and provides for a quick view of positions and advisors assigned to the project. All advisor positions and personnel are shown even though a few of them were not requested to provide services during the reporting period.

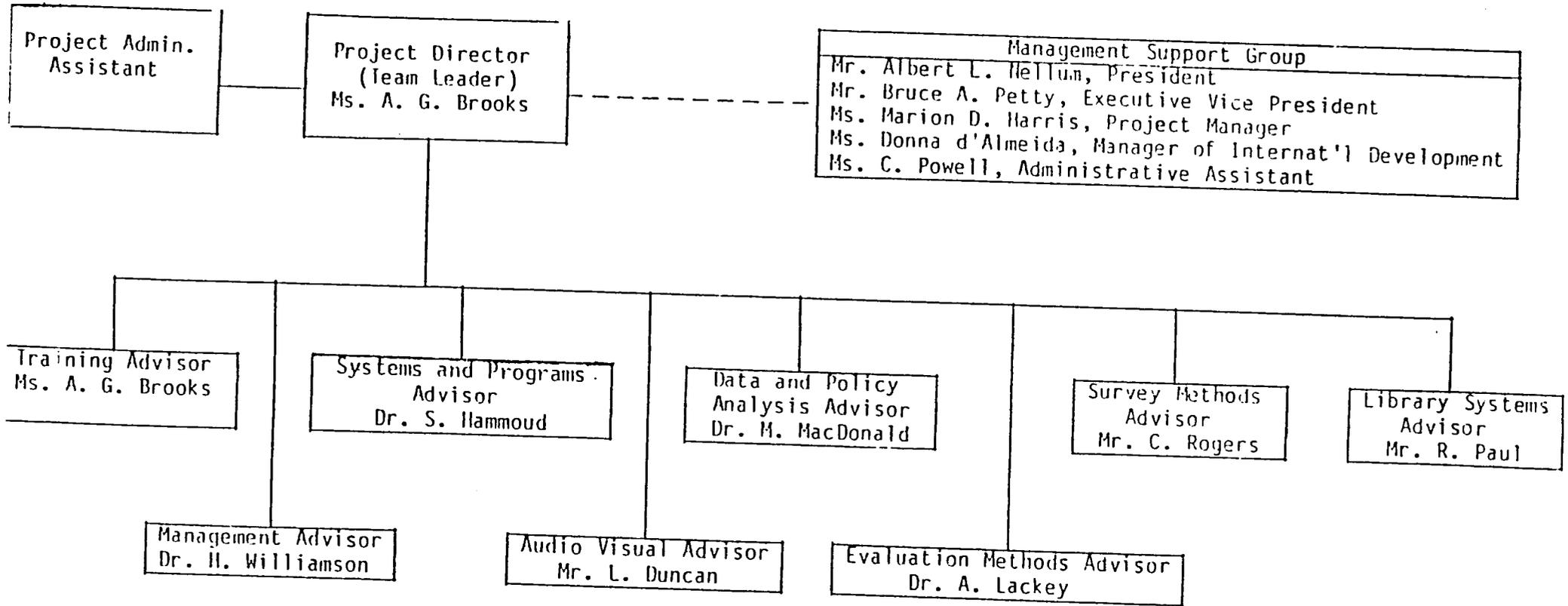
It should be noted that two changes in personnel were made during year three of the contract. Dr. Malcolm MacDonald replaced Dr. Florencio Valdivia as the Data and Policy Analysis Advisor. And, Mr. Charles Rogers replaced Dr. Vincent Lindquist as the Survey Methods Advisor.

For two positions, no advisory support was requested during Year 3. The Audio Visual Specialist was unable to continue support during this period because purchase of equipment on which his activities were to be based was delayed. Further, the work of the Evaluation Methods Advisor was



APP TECHNICAL ASSISTANCE
PROJECT ORGANIZATION

Organization Chart for the Implementation Team



essentially completed pending the approval and implementation of the MOA's Five-Year Plan.

Exhibit 2-2 presents the utilization of short and long-term advisors during the reporting period.

2.2.1 APP Team Organization

During year three of the project, Ms. A. G. Brooks continued to function as the Team Leader and Training Advisor. She was supported in her administrative and management responsibilities by Sandra Hamilton as the Administrative Assistant and the home based management support group comprised of Mr. Albert L. Nellum, President; Mr. Bruce A. Petty, Executive Vice President; Ms. Marion Delaney-Harris, Project Manager; Ms. Donna d'Almeida, Manager of International Development; and Ms. Carolyn Powell, Administrative Assistant.

The management support group provided backstop support by providing evaluation, planning, logistical recruitment, contract administration, personnel administration and Washington AID liaison support.

The organizational structure continued to provide for autonomous consultancies by advisors within the MOA organization in which they were assigned while at the same time providing for strict coordination of work plans, recommendations and all products developed with the Team Leader, APP program director and USAID.

This kind of organizational philosophy only works when all parties in the structure are professional and fully competent. It is a credit to the MOA, USAID and ALNA's team that the final 17 months of the project were productive ones in spite of resource and schedule constraints.

2.2.2 APP Team Utilization

Approximately 1009 persondays were expended during the reporting period. Of this amount, 670 were utilized by long-term staff, 231 for short-term advisory assistance, and 108 were utilized in backstop support.

Three full-time staff were assigned this year. the Team Leader/ Training Advisor, Ms. Geraldine Brooks, supervised all project staff and was responsible for the overall planning and day-to-day operations of the project. She also served as Training Advisor providing advisory support to the Training Division of MOA and to ALNA advisors. She expended 267 persondays in her dual role, dividing her time at a level of 40% for team leadership and 60% as training advisor. Within the structure of the MOA she supported and took direction from Mr. Trevor Clarke, APP Program and Budget Director, MOA, and Mr. Cyrcil Buchanan, USAID.

The Systems and Programs Advisor, Dr. Salim Hammoud, expended 147 persondays in the process of advisory support to the Data Bank and Evaluation Division which is headed by Mr. Lester Boyne. His services were provided from January 1983 to August 1983. Dr. Hammoud provided training to Division staff in systems design, assisted in planning for the installation of new hardware, and developed software for MOA surveys. And the Data and

 A. L. NELLUM AND ASSOCIATES

Advisor Utilization Chart

Exhibit 2-2

Advisor	Specialty Area	Period of Performance	Unit Assignment	Days Expended by Month																	TOTAL	
				1983					1984					1994								
				Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May		
Geraldine Brooks	Team Leader	1/83 - 3/84	Trevor Clarke, Dir Budgets & Programs	11.0	11.5	14	12	9	11.5	12	9.5	7	12.5	13	9	12.5	9	7			160.5	
G. Brooks Salim	Trainer	1/83 - 3/84		7.5	7.5	9	8	6	7.5	8	6	5	8.5	9	6	8.5	6	4			106.5	
Hammoud Halcolm	Systems and Programs	1/83 - 8/83	Lester Boyne	14	16	19	12	21	22	20	23										147.0	
McDonald Charles	Data and Policy	5/83-5/15/84	Dr. Leroy Taylor 5-Year Plan					11	22	20	23	21	21	22	21	21	20	22	21	11	256.0	
Rogers Rameshwar Paul	Survey Methods Library Systems	9/83 - 5/84 1/83 - 2/83 5/83 - 7/83 4/84 - 5/84	Lester Boyne Data Bank & Eval. Lester Boyne Data Bank & Eval.	17.5	19			10	8				.5	12	22	10	14	20	8	16	22	124.5
Handy Mmson	Management	7/83	N/A																			
Lionel Duncan	Aud to-Visual									6												6.0
Alvin Lackey	Evaluation																					
Albert L. Nellum	Backstop/ Mgmt. Support																					
Bruce A. Petty	Backstop/ Mgmt. Support	1/83 - 5/84		6	1 hr	6	2	2	2	8	3	3	4	3.5	4	3	2	2	2	2	2	57.5 days 1.0 hour
Marion D. Harris	Backstop/ Mgmt. Support	1/83 - 3/83		8		2.5																10.5
Sharlynn Bobo	Backstop/ Mgmt. Support	10/83 & 1/84											1		2							3.0
Donna d'Almeida	Backstop/ Mgmt. Support	9/83 - 1/83 - 9/83											2									2.0
Carolyn Powell	Support	12/83 - 5/84		1	1.5	2	2	2	2	1	2	2	-	-	1	2	-	2	2	4		25.5
Barbara White	Support	1/83, 3-4/83 8/83, 10/83		7.5 hrs		1.5 hrs	2.0 hrs					2.5 hrs		1.5 hrs								1.5 days 3.0 hrs
Hayes (WP)	Support (Graphics)	7/83								7.0 hrs												0.5 days 3.0 hrs
Louise Altes	Support	1/83		1 dy 7 hr																		1.5 days 3.0 hrs
David Levine		4/83					3 dy 5 hr															3.0 hrs 3.5 days 1.0 hrs
TOTALS				67.5 2.5h	65.5 1 hr	52.5 1.5h	39.5 3 hr	61	75	75.5 8 hr	66.5 2.5h	40.5	59 1.5h	69.5	51	63	57	45	64.5	65	1009.0 days 3.0 hrs	

Policy Advisor, Dr. Malcolm MacDonald, expended 256 persondays in the development of the Five Year Plan working in cooperation with Dr. Leroy Taylor, Special Assistant to the Ministry of Agriculture. He worked to coordinate the participation of over 100 of Jamaica's most outstanding agriculturalists in the development of this plan.

Three short-term advisors were also utilized. The Survey Methods Advisor, Mr. Charles Rogers, provided 1245 persondays to the Data Bank and Evaluation Division and was responsible to Lester Boyne for the provision of a variety of services to enhance the capability of MOA in the development and implementation of required studies. He focused on the redesign of a quarterly Crops Production survey, examining sampling frame alternatives. The Systems Advisor, Dr. Rameshwar Paul provided 101 persondays of support services to the Data Bank and Evaluation Division under the guidance of Lester Boyne. His services were to develop and implement a Library Information System. And, the Management Advisor, Dr. Handy Williamson, expended 6 persondays in the review of the APP management system, reporting findings to the APP Program Director, ALNA and USAID.

In the area of Management Support, the ALNA backstop team located in Washington, D.C. provided 108 persondays of service in areas of short and long term staff and advisors, logistical support, recruitment, domestic personnel administration, central administration, personnel administration, graphic support, project planning and evaluation.



2.3 Team Leader

2.3.1 Scope of Work

During the course of the third year, the Scope of Work for the Team Leader continued to grow in terms of quality and quantity. The demand for services continued to expand and broaden. By the end of the year, the Team Leader function had evolved from a liaison-coordinating-supervisory role for the ALNA contract to a managerial-planning-motivational role for MOA's Agricultural Planning Project.

In our Year Two Report, we recommended that the position of Team Leader become full-time. During year three we offered to replace the Team Leader. Both of these suggestions were aimed at solving the problems resulting from the expanding and broadening demands of the position. A full-time position would have enabled us to respond fully to the increase in services requested. A new person could also have brought the additional wealth and depth of knowledge, skills, and experience required of the enlarged position.

However, we failed to make our case at both the Ministry and the Mission. At a more disturbing level, we believe our case was misunderstood. At the end of the third year, we were advised that our Team Leader was not required for the remaining four-month term of the contract.

We wish to point out for the record that our Team Leader performed admirably the functions required in the original scope of work. However, as the functions broadened, we believed a person with a different set of knowledge, skills and experiences could have better served the project. It was not our intention to suggest that our Team Leader was incompetent to function at the level of the original work scope. However, we were suggesting that the project would be better served by a change in the work scope and that such a change would require a person with different skills.

It is, therefore, ALNA's position that the reason for not continuing the project with a Team Leader is the Ministry's and Mission's belief that the scope of services recommended was more ambitious than what they perceived as necessary for the remainder of the project and not due to the performance of the project Team Leader.

2.3.2 Accomplishments

Although we hold that the project would have been greatly improved had our recommendations been heeded, we were very successful with our accomplishment under the limited formal scope of services and the informal additional services we provided. The additional services we performed were prerequisite to the performance of the contracted scope of work.

In terms of the overall goals for the final 17 months of contract effort, the Team Leader was responsible for management and coordination of the contract to ensure maximum contribution to the APP, on-going coordination of technical assistance efforts and continued responsiveness to the changing needs of the Ministry. In accomplishing this goal, Ms. Brooks

engaged in the following activities during the final 17 months of the contract:

- Served as liaison with the Project Manager designated by the MOA;
- Established a reporting/coordinating role with the Rural Development Officer (RDO), US/AID/Jamaica;
- Assisted the MOA to keep the US/AID fully informed of project activities;
- Assisted the MOA to coordinate with US/AID;
- Established the necessary relationships with the various sections of the central Ministry of Agriculture and other ministries involved in implementation, as well as the units of the project itself--training division, policy and planning review division, and Data Bank and Evaluation Division;
- Supervised and coordinated the activities of all members of the technical assistance team to achieve maximum results; and
- Participated in the identification and scheduling of short-term assistance as required.

The specific accomplishments of the Team Leader in support of the general management goals of the contract included:

- Assisted in the development of a technical Library to be housed in the Data Bank and Evaluation Division. The Library was to be established to maintain and reproduce information on all projects and programs currently in process at the Ministry of Agriculture.
- As a member of the Agricultural Policy Committee for the five-year plan, participated in the design and content development of the five-year plan.
- Informed mission of contract activities in a thorough and timely manner.
- Developed work plans for all advisors for approval by the Mission and Ministry prior to assignment. Monthly reports were prepared by all advisors and reviewed by the Mission and Ministry.
- Substantially improved the planning capability of the Ministry through the experience gained in the development of the five-year plan, the conduct of several surveys, development of the Library Information System, development of the automatic data processing system and the training of staff in data collection, survey methods, and technology transfer.



- Enhanced the coordination of Division and branch activities related to the APP by attending all project related meetings held by the Mission.
- Enhanced the coordination and centralization of training activity to prevent dual capability and duplication in training at the MOA branch and Division levels by participating in top-level management meetings aimed at the institutionalization of the MOA training division and its new centralized role.
- Selected, hired, oriented and assigned a Data and Policy Analyst and a Survey Methods Specialist as advisors to the APP.
- Revised the APP to accommodate the need for mid-term corrections in the Log frame. The results was revised work plans and the request for a one-year extension for the MOA project. The framework for the revisions were developed at an Agricultural Planning Project Retreat held June 8 to 10.
- Modification of ALNA's contract to adjust the budget to accommodate increased levels on the part of advisors.
- Developed a plan for the recruitment of local candidates for MOA/APP positions of programmer and system analysis.
- Developed a training policy paper for the Training Division.
- Developed a work plan for 1983-1984 for ALNA APP staff.

2.3.3 Constraints

During the second year and continuing into the third year, the Team Leader found herself spending a great deal of time maintaining within the Ministry the initial enthusiasm for the project. In order to maintain our schedule it became necessary to help the Ministry maintain focus on the project. This involved encouraging the Ministry leadership to hire staff, order equipment, act on advisor recommendations, and promote the importance of long-term planning.

The management staff of the Ministry was involved in many different assistance projects. The newer projects seemed to command greater resources, time, and personnel than the older projects. Consequently, the older projects were constantly battling for attention, material, personnel, equipment and other resources.

Specifically, the Team Leader spent time facilitating decisions about ADP equipment selection and purchases based on recommendations by the System and Programs Advisor. Similarly, a great deal of time was spent in gaining action on decisions relative to the Five-Year Plan, training activities, audio visuals, and the library system recommendations.

Once decisions were made on past recommendations, decisions were needed regarding new work plan and schedules for advisors.

Consequently, the Team Leader had to be cognizant about the overall management of the Ministry to insure that the objectives of the APP would be realized. Some of the additional functions which were more of a managerial- planning-motivational role than originally envisioned are presented below.

- working with top management of the Ministry to gain their support for the development of the Five-Year Plan;
- assuming a leadership/catalyst role in organizing and guiding MOA/APP project staff to address project goals and issues;
- promoting/selling planning as the essential element needed by the Ministry to enhance its efforts to get data and information to other projects and agencies such as Agro 21, the National Planning Institute and commodity boards;
- attending Ministry management meetings to facilitate decision making relative to the APP;
- development of work plan and implementation schedules for MOA staff and approving plans and schedules; and
- orientation of new managers, consultants and staff.

2.3.4 Recommendations

As noted above, the role of the Team Leader has acquired increasing administrative and policy emphasis through the life of the project. Of prime importance is the function of serving as the "glue" which holds the project together--stimulating action, identifying and resolving communication problems, preventing overlaps and gaps in effort, and generally serving as an advocate for structured planning within the MOA.

With the final development and approval of the Five-Year Plan, the Ministry (and the APP) now face the biggest challenge of all--the implementation of the Plan, and the thoughtful and effective evaluation of its progress. The functions listed above become more essential than ever to the accomplishment of APP goals.

ALNA is therefore recommending that, should AID select to continue the APP technical assistance efforts, a full-time Team Leader be recruited to direct the continued efforts of the technical assistance contract. This individual should have an extensive background in the development and implementation of agricultural policy on a national level. Also required will be proven skills in the management and administration of technical assistance and policy design contracts in developing countries.



2.4 Training Advisor

2.4.1 Scope of Work

Ms. A. G. Brooks provided services in accordance with the original scope of work from January 1983 through August 1983. In her capacity as Training Advisor, Ms. Brooks was responsible for accomplishment of the overall contract goal of assessment, design and delivery of needed training for MOA staff. In accomplishing this goal, Ms. Brooks was tasked to:

- maintain the training management system and establish courses appropriate to a central training office in agriculture;
- establish a centralized learning resource center;
- assist in the development of in-country training schedules, suggested course content and additional sources of instruction;
- advised MOA on courses in the United States which would achieve the short and/or long-term training objectives set out in the master training plan; and
- designed and assisted in the planning and implementation of all in-country courses relating to the training of the staff under the purview of the training division center.

During this period she worked against a specific work plan which involved responding to training requests as presented below:

- serve as a resource person for meetings under "Development of New Training Philosophy;"
- serve as resource to the task force for designing and implementing training courses for CARICAD management training course;
- assist the task force to review "field extension training course;"
- advise and assist the training division and Data Bank and Evaluation Division on Skills Inventory System;
- design and implement a system design workshop;
- write articles for the training division magazine "Focus"
- attend training division staff meetings and training officer review meetings.

tasks. Ms. Brooks expended 59.5 persondays in the execution of these

In September of 1983, Dr. G. Brown joined the MOA staff, assuming the position of Human Resource Development and Training Advisor. Ms. Brooks assisted Dr. Brown in the following tasks:

- completion of a skills inventory and completion of a master training plan for the entire Ministry of Agriculture by 1984;
- planning and implementation of all in-country courses relating to the training of the staff under the provision of the Training Division;
- recommending courses in the United States which would achieve the short and/or long-term training objectives set out in the master training plan and serve on training tasks forces as required;
- development of in-country training schedules, suggestions in course content and additional courses for instructors;
- assisting the Director of Training to develop appropriate training schedules covered within the overall training policy.

Ms. Brooks expended 47 persondays in support of the task during the period covering September 1983 to March 1984.

2.4.2 Accomplishments

During the reporting period, Ms. Brooks accomplished the general training goal of the contract period. In doing so, she addressed the following specific objectives in her role as Training Advisor on the technical assistance contract:

- A training curriculum manual with a training schedule and program for the field assistants course was developed.
- The section of the five-year plan dealing with training policy for the Ministry of Agriculture was completed.
- The skills inventory was completed.
- The Master training plan for the entire Ministry of Agriculture was revised and updated.
- In-country training courses were developed and conducted.
- Trainee assignments were made in the United States. Beulah Advo and John Campbell were placed at American University. Valeria Brown was placed at Cornell University.
- The Mission was informed on an on-going basis of development and implementation of training plans and activities.



- A full-time coordinator of Human Resource Development and Training for the MOA was hired and oriented.
- A training of trainers course for twenty five participants from all the Islands in the region was developed and conducted. The program was titled the CARICON training program.
- An article in FOCUS title "Cross Training" was published;
- A "Systems Design Workshop" Curriculum was developed;
- A training course on communications was developed and delivered at the St. James Land Authority.

2.4.3 Constraints

Two major factors created problems in the accomplishment of the Scope of Work for Ms. Brooks in her role as Training Advisor. The first, as noted earlier, was the continued increased demand inherent in the Team Leader role. This, coupled with continued high turnover rates among MOA staff, created some barriers to the accomplishment of specific staff training objectives.

Work goals relevant to the finalization of the Master Training Plan also encountered barriers. In recognition that the finalization of the the Training Plan prior to final approval of the Five-Year Plan would likely result in poor coordination of training activities, the Training Division has postponed this milestone. Thus, many planned training policy development and implementation activities have been put "on hold" pending the completion of the Master Training Plan.

2.4.4 Recommendations

With the arrival of Dr. Brown in the position of Human Resource Development and Training Advisor to MOA, the ALNA Technical Assistance project took on a new role of coordination and support in the area of training. It should be noted that we are recommending a range of training design and delivery functions in our continued technical assistance efforts. It is essential, however, that these activities take place in strict compliance with the objectives of the Master Training Plan, and in close coordination with Dr. Brown and the Ministry's Training Division. Specific areas of coordination should include: training for staff of the Data Bank and Evaluation Division in information systems, programming, specification development, system documentation and data analysis; and, formal and on-the-job training of Data Bank and Evaluation Division staff in survey methodology, design, conduct and analysis.

2.5 Systems and Programs Advisor

The Project's Systems and Program Advisor, Dr. Salim Hammoud, was posted in Jamaica from January through August of 1983. Dr. Hammoud has been involved with the Project for some time, having successfully completed three previous short-term assignments on the contract.

2.5.1 Scope of Work

The general mandate of the Systems and Program Advisor was to provide an improved statistical and analytical base for the formulation of agricultural policy, and the design and evaluation of rural development projects. The overall goals of this advisor were:

- to increase MOA's institutional capacity in data collection, management, analysis and processing;
- to manage the data management training of MOA personnel;
- to develop, interpret and analyze overall government policies as they affect agriculture and rural development; and,
- to design, plan, implement and evaluate projects.

During the reporting period, Dr. Hammoud's task was to continue the design and development of systems to enhance these goals, and to continue training to upgrade the skills of MOA staff in systems design and utilization. These activities were to focus on the installation and integration of an IBM System/38 computer to replace the System/34 which had proven to be inadequate to meet the MOA's data processing needs.

2.5.2 Accomplishments

During 1983, the Systems and Program Advisor provided technical assistance and consultation in the areas of development, management and utilization of the MOA's data processing capabilities. The focus of his activities was to provide continued support of the Ministry's decision making, program planning, research, management and training functions.

Of major importance was the distribution of Dr. Hammoud's 1982 report, "Manpower Resources Inventory and Planning System" to Division Directors throughout the Ministry. This report identified training needs in the area of information sciences and was based on a comprehensive needs assessment conducted in all of the Ministry's Divisions.

Additional accomplishments during the reporting period included:

- presentation of suggested approaches to all aspects of the Ministry's systems development and implementation activities with a corresponding time schedule;
- preparation of design, coding and programming of a general survey package on MOA and Central Data Processing Unit



computers to provide a flexible programming capacity in the conduct of future MOA surveys;

- design of an approach to the development of a software FORTRAN program to accomplish the processing of the Base-Line Credit Survey, involving 700 questionnaires and 115 statistical tables on various crops, livestock and other relevant information on farmers;
- finalization of detailed procedures and timetables for the purchase and installation of MOA's IBM system/38 computer.

2.5.3 Constraints

While Dr. Hammoud continued to contribute to the development of the MOA's information systems capacity as detailed above, a major barrier to much of his original 1983 Scope of Work arose early in the year. At that time, it became apparent that installation of the IBM System/38 computer would be seriously delayed due to the need for approval from the office of the Prime Minister and the amount of paperwork to be completed by US/AID to requisition the equipment. Thus, many of the projected services of the Systems and Program Advisor in the installation and integration of the new system within the MOA could not be accomplished.

2.5.4 Recommendations

Events over the past two years have amply demonstrated that the demand for computer services within MOA will continue to increase. With the installation of the IBM System/38, the Ministry will be better able to address demands. However, a number of additional activities are necessary to ensure that MOA receives maximum benefit from this resource. These include:

- increasing data processing staff to ensure adequate staff support to address both increased need and increased capability;
- continued training of MOA staff in the areas of computer programming, systems documentation, writing of instructional manuals and users' guides, and use of computer language;
- the development of a comprehensive guide for users of the IBM System/38, both inside and outside MOA. An existing users' guide from a well-known computer service center should be used as a model. At the same time, periodic publications (newsletter, informational brochure, annual report) could be planned. This should be done as soon as possible;
- the design and implementation of a program or orientation for existing users to the new system and development of an ongoing program of training for new users. This should be done upon the arrival of the new system;

- design of a realistic charging system for use of computer services to ensure accurate reflection of computer resource utilization throughout the Ministry;
- a study of the feasibility of converting the Data Processing Department to a corporation wholly owned by MOA which functions as a computer service bureau to various divisions of the Ministry on a fee-for-service basis;
- development of computer room operating procedures;
- exploration and establishment of tele-communications links;
- acquisition of an uninterruptible power supply, which is essential to a time-sharing mode of operation to protect both MOA and its users from the inconvenience and wasteful rerunning caused by losses of power. The UPS consists of a quantity of batteries in series with the main power source and a charging apparatus to keep them at a state of readiness. They protect against power fluctuations as well as outright outages; and,
- establishment of a pilot remote linkup to establish a remote site, including identifying an appropriate linkup; acquisition of the needed computer hardware, communication equipment, and computer software; establishment of the physical link; and implementation of a pilot application using the remote linkup with CDPU.



2.6 Data and Policy Advisor

2.6.1 Scope of Work

The period of performance for the Data and Policy Analysis was for one year covering May 15, 1983 to May 15, 1984. During the period Dr. Malcolm MacDonald worked full-time providing technical assistance in the preparation of the Ministry of Agriculture's Five-Year Agricultural Policy and Production Plan. He worked closely throughout the year with Dr. Leroy Taylor, who was designated by the Ministry of Agriculture to direct the preparation of the Plan.

Dr. MacDonald expended 256 persondays assisting in the development of the Five-Year Plan. The final draft of the Plan was submitted in May 1984 to the Minister of Agriculture for senior policy level consideration.

2.6.2 Accomplishments

The completion of the Five-Year Plan marks a major accomplishment and, indeed, a milestone for the APP. Although the Plan is two years late in its development, its importance cannot be underrated given its potential impact on both the attitude of agriculture professionals towards planning and its potential utility as the Ministry's most effective management tool.

Had the Five-Year Plan been developed during the first year of the Agriculture Planning Project instead of the final year, it would have been used as the guide for the training and data base components of the APP. However, even though these components have advanced considerably, plans may be made now for pulling together these components of the APP as originally envisioned by US/AID into an articulated sectional planning process.

The process of the development of the Five-Year Plan results in partial accomplishment of US/AID's goal of institutionalizing planning in the public and private sectors of the country.

Over one hundred of Jamaica's most outstanding agricultural professionals within and outside of the Ministry of Agriculture actively participated in the preparation of the Plan document. Thus, professionals are knowledgeable about and identify with the Plan rather than seeing it as just another document, and are therefore, more committed to "planning" than in the past. The participation of Agro 21 consultants in the Agricultural Policy Committee and in appropriate work has permitted the incorporation of much of Agro 21's projections in the Plan.

Finally, these agriculture professionals are already using the draft document to prepare sub-plans in their areas of responsibility. Their recognition of the document and process as an effective tool for day-to-day management is already apparent.

Specific contributions of the Advisor, Dr. MacDonald, include

- Assisted Dr. Leroy Taylor in the development and management of the process for developing the Five-Year Agriculture Plan document;



- Served as head of two of the Plan document work groups;
- Prepared issue papers and developed various sections of the document;
- Coordinated weekly reviews of work group products;
- Participated in the development of the following issue papers or sections of the Five Year Plan
 - "Proposals for Feed Grain Production"
 - "Small Farmers and Their Development in Jamaica"
 - Export and Industrial Crops
 - Domestic Crops
 - Fisheries
 - Beef and Dairy Cattle
 - Small Stock
 - Poultry
 - Veterinary Technical Services
 - Breeding Services and Breed Development
 - Nutrition

2.6.3 Constraints

Once the Ministry prioritized the development of the Five-Year Plan, its development progressed rapidly and highly professionally. With assignment of Dr. Leroy Taylor to head the development of the plan and his subsequent establishment of a process for Plan development involving task forces comprised of staff from various MOA divisions and units, the required research, data and information collection, and preparation of "papers" progressed according to plan and established schedules.

Given the commitment of top management to the development of the Plan, barriers to its development such as availability of personnel and prioritizing of surveys and data collection can come to an end. Without these barriers, the work group documents for the draft were completed within the scheduled timeframe, although a shortage of secretarial help prevented production of the draft plan until mid-May.

2.6.4 Recommendations

Now that the plan is undergoing senior policy review, steps must be taken by the MOA and US/AID to ensure that the document is published without delays which could result from extensive rewrite born of the desire to have a perfect document which takes into account all issues and considerations.

The desire for perfection is often the major stumbling block which keeps plans from being completed. There are always--even on a daily basis--new data and information which can be added to a plan. However, if an attempt is made to include the most current available information and issues, the document will never complete the revision stage.

Reviewers of the document should be advised and satisfied that the document is a "living plan" and an on-going process and thus will be revised more often than on the five-year basis. It is the current plan to review and adjust the document every year and revise subsequent years as appropriate to accommodate new issues, data and information.

We recommend that the MOA adopt a Five-Year Rollover Plan process which provides for the incorporation of information and efficiencies acquired and analyzed during the preceding year; adjusting to changes in Government priorities and the overall economic situation; and projecting the Plan one more year into the future, thus maintaining a five-year planning horizon.

We suggest that this review and adjustment involve, during the initial two years, the core team and work group involved in the original Five-Year Plan process to assure continuity.



2.7 Survey Methods Advisor

2.7.1 Scope of Work

The Survey Methods Advisor was assigned to the Data Bank and Evaluation Division on October 17, 1983 to support the design and conduct of surveys and studies conducted by the Division through May 31, 1984. The assignment is that of a general statistical advisor to the Division. Mr. Charles Rogers assumed that position. His specific scope of work includes:

- advisory support in the development of an objective data collection and processing system for crop acreage and production estimates and forecasts;
- assistance and support in the development of an objective yield estimating system for crops;
- advisory support in data collection procedures and analysis of livestock, prices and other surveys;
- on-the-job-training for Data Collection and Statistics staff in the Data Bank and Evaluation Division; and,
- general statistical consultation to the Division as needs arise.

2.7.2 Accomplishments

Mr. Rogers first visit on this assignment was for two months in October, November and December, 1983. Following a three-week orientation, including extensive site visits to Jamaica's agricultural centers, he proceeded to conduct a review and evaluation of the sample frame used in the 1979-80 quarterly crop production surveys to determine the areas and specific requirements of appropriate revision. During this two months of effort, Mr. Rogers:

- prepared proposals and recommendations to revise area frames, select new samples, supplement the samples with lists and re-establish the Crop Acreage and Production Survey;
- began investigation and planning for revising area frame and survey materials to prepare for an April 1984 pretest of the Crop Acreage and Production Survey;
- prepared recommendations of options on coverage evaluation of the August, 1983 Cattle Survey; and
- provided orientation and resource location assistance to staff of the Division as needed.

A second visit covered two months during January, February and March, 1984. During this visit, Mr. Rogers:



- continued with planning and preparation for a quarterly crop production survey. This work included procurement of maps and other materials, optimum allocation of sample to strata, preparation of a sample rotation plan, design of the questionnaire and preparation of edit checks, estimators and output formats for survey processing;
- prepared methodology for field weights and measures to be used in objective yield estimates for yam and onion;
- reviewed and evaluated all existing repetitive surveys conducted by the Data Bank and Evaluation Division and prepared proposals for modification and the collection of data for further evaluation;
- participated in planning and the preparation of materials for updating the Farmers Register; and
- conducted regular training sessions each week with additional sessions as staff were available.

The third and final visit covered approximately two months ending May 31, 1984. During this visit, Mr. Rogers:

- assisted with implementation of a new area frame and sample for a crop production survey. This involved orientation and training for photo interpretation, land use stratification, map measurement, sample selection and the preparation of enumeration maps. Work sample selection and preparation of enumeration maps was still in progress at the end of this assignment;
- prepared methodology for selecting an objective yield sample of farms and fields from crops listed in the area frame crop production survey;
- discussed processing of the crop production survey and the cattle survey with the Data Processing staff. Prepared and discussed examples of expanded estimates and measures of their reliability; and
- consulted with Data Collection staff and others concerning various types of statistical work including experimental design and analysis and surveys for special types of data.

2.7.3 Constraints

During the period that Mr. Rogers was reviewing and evaluating the methodology applied in the 1979-80 quarterly crop production surveys, none of the staff which had participated in that project was still employed by the Division. This meant questions about the logic and rationale for the design of those surveys were not answerable by incumbent staff in many cases. It also created difficulty in locating materials and worksheets.



The information gap cost valuable time in review and analysis of both the sample and the sample frames.

Also, due to the fact that many Division staff were away during the period when Mr. Rogers was in Jamaica, formal and non-formal staff training did not occur at the level anticipated.

Infrared photography, for the area frame revision, was expected in January, but did not become available until late March. This delayed the beginning of the frame and sample revision. As a result, the planned first survey was delayed from April 1984 to July, 1984. Also, Division staff time and supervision on the area frame and sample work was not adequate and the delayed July 1984 survey is questionable. Space, lighting and equipment were not adequate for the area frame, map and photo work. This delayed production and discouraged quality. Scales for objective work were ordered but not available at the end of this assignment. Some technical assistance will probably be necessary if the work is to be researched, tested and implemented.

2.7.4 Recommendations

The following general recommendations were submitted by the Survey Methods Advisor:

- A crop production survey should be implemented as soon as possible to provide an objective basis for acreage and production forecasts and estimates.
- The new sample should consist of a larger number of smaller segments than were used in 1979-80.
- The area sample should be supplemented with list after it is well established. This supplementation should reduce the sampling error of the estimates for many crops.
- An annual rotation plan should be incorporated into the sample design.
- The crop production survey list of tracts should be used to provide a frame for objective yield samples, crop production survey samples and other special surveys.
- The area frame survey should be extended to livestock, poultry and economic data on an open segment basis after crop surveys are well established.
- Objective yield work should be initiated immediately when equipment is available. It should first begin on an experimental and training level for a short harvest crop (onion), a long harvest crop (yam) and a continuous harvest crop (banana). This work can provide validation, strong support and defense for yield estimates from the crop production survey.



- A full-time survey research person should be available on the Data Collection staff for maintenance review, evaluation and development of sample frames, samples and survey materials.
- Intermittent technical assistance should be obtained when possible to provide support in all sampling and survey work.
- Training in all phases of statistics and survey work should be utilized whenever possible.

Detailed reports and proposals covering all phases of the crop production survey preparation and processing, objective yield work and other survey work and processing were provided to the Ministry and USAID during this assignment.



2.8 Library Systems Advisor

2.8.1 Scope of Work

Dr. R. Paul expended 101 persondays during 1983 providing advisor services to the Data Bank and Evaluation Division. His scope of work generally involved the design of the Library Information System. Two visits were made in January and May.

The January visit was planned to:

- Develop programs to manage the Information Resources of the Agricultural Planning Project;
- Develop a Functional Organizational Structure for proposed Library Information System.

A second visit occurred in May. The purpose of the visit was to:

- Gain approval for the proposed program to manage the Information Resources of the APP;
- Gain approval for the proposed functional organizational structure;
- Finalize restructuring of the Library Information System;
- Develop the scopes and operational specifications/standards of the Library Information System's programs and services;
- Assess the training needs of the Library Information Systems personnel and developing a training program to meet them;
- Evaluation and, if necessary, mid-course correction of the LIS program and services;
- Review operational policies and procedures of LIS to obtain economics and efficiencies of operations;
- Identify candidate areas for application and appropriate information technology to achieve better cost effectiveness; and
- Advise and assist on other related issues and problems confronting MOA management and LIS staff.

2.8.2 Accomplishments

The major products of the consultancy were:

- conceptualization of the Library Information System;
- development of a Management Plan for the LIS; and



- development of training plans.

It was anticipated that three visits would be utilized during 1983. During the first visit the system would be developed and two visits would be utilized to implement the system. Had our proposed plan been adhered to, visits would have been made in January, May and November of 1983, resulting in an operating system by the first of 1984.

Even though the proposals were approved by Mr. Cyril Buchanan of US/AID, the APP policy body and Director, and Lester Boyne of the Data Bank and Evaluation Division, the Ministry did not take concrete steps to implement it. Consequently, and counter to our expectations, the second visit was spent trying to get approval to proceed with implementation. Instead Dr. Paul was engaged in:

- addressing the MOA Library Training course participants on Public Relations in Libraries;
- waiting for meetings with the Personnel Secretary;
- developing recommendations for the Director of Programming and Planning on integrated reporting systems;
- reviewing the ISIS Information System; and
- participating in the APP review meeting.

None of these items was in the work plan for the second visit.

2.8.3 Constraints

Inadequate planning for use of the advisor seems to be the primary barrier to the advisor being able to complete his task as planned. However, there seem to be secondary barriers to the completion of the tasks which may be the real source of the primary barrier.

Implementation of the LIS requires staff, materials and equipment resources. It is possible, although not stated, that the APP Director failed to initiate implementation of the LIS because these resources were not available. Consequently, even though all parties pertinent to the approval of the system had approved it, the Director was unable to proceed without the required resources.

Lack of resources is an acceptable reason for holding up implementation. However, this reason was and has not been given to date. Therefore, we are left to surmise that poor planning is the reason for (a) the delay (eight months) in official approval of the system's implementation; and (b) for not utilizing the advisor for implementation purposes once he was called forward.

These issues of management of information effect multiple MOA components. There seems to be natural reluctance on the part of MOA to realign these functions--a step necessary to realize an effective management and utilization of the Ministry's information resources. The Ministry is



slowly beginning to recognize, develop and implement a policy making function in the area of information and computer resources. We hope that the Ministry will be able to move in this direction more quickly as it prepares to implement the Five-Year Plan. We believe that the requirements of the successful implementation of the Plan will mandate an effective information management system along the lines we have proposed.

2.8.4 Recommendations

Both programmatic and management recommendations are in order for this advisor. Both the management and programmatic recommendations will assure that APP project objectives are accomplished prior to the end of the contract. Consequently, we recommend:

- The Five-Year Plan is in the final stage of development. Because of the critical role of information in the implementation of the plan and planning in general, it is essential that the plan contain a section regarding the policies, availability, management and utilization of information in Jamaica agriculture. Dr. Paul can develop this section of the Plan during this proposed visit.
- Once again, advisor utilization resulting from inadequate planning has resulted in advisor time not being used to meet priority goals and objectives. It is very important that MOA, AID and ALNA work together to ensure that advisors are used appropriately. We must continue to work to help MOA use consultants in a timely, efficient manner to avoid loss of valuable, costly time on the part of advisors. One way to ensure positive planning is to require that 30 days notice be given AID prior to issuance of a "call forward." Next, AID should check to insure that all approvals and resources required for the advisor to proceed are available upon his/her arrival.



3.0

MOA'S ACCOMPLISHMENTS RESULTING FROM DIRECT AND INDIRECT APP TECHNICAL SUPPORT

1983 and 1984 may be recorded as banner years for productivity on the part of staff of the Ministry of Agriculture.

In the face of limited and shrinking resources, higher demand for services from within and outside of the Ministry and the problem of competitive demand for the limited personnel, money and material resources, the staff managed--to the satisfaction of most of its clients--to provide a variety of high quality services and products.

The Ministry of Agriculture responded to requests for data from the Government action government departments, statutory bodies, and international organizations and educational institutions. The Ministry responded to requests calling for surveys, production estimates, census data, farmgate prices, and valuations imports. It also responded to many requests for training and evaluation activities.

The majority of the services and products initiated or completed in 1983 resulted from the enhanced capability of staff gained from the three years of technical support provided by the contractor. The contractor's promotional and technical efforts in planning generally and specifically in the areas of survey methodology, evaluation, policy and data analysis, library systems and project management contributed both directly and indirectly in the Ministry's 1983-84 accomplishments. The exhibit following this page summarizes the accomplishments of the Ministry of Agriculture during the reporting period.

Suffice it to say, these accomplishments were in keeping with the Government of Jamaica's long- and short-term goals. The development of the first draft of the Five-Year Plan, the compilation or distribution of the Farmer's Register, Meat Statistics 1972-1982, Indices of Domestic Agricultural Production and Farmgate Prices 1972-1982 and the Census of Pig Farmers in Jamaica, September 1980 are examples of how the MOA met both long- and short-term needs during 1983. These products are fine illustrations of how the enhanced capacity of the Ministry can contribute to the success of other projects such as Agro 21 and CRIES, as well as other government planning agencies, the Parishes and most importantly, the farmer.





A. L. NELLUM AND ASSOCIATES

SUMMARY OF MOA ACCOMPLISHMENTS

Division	Accomplishments	IA Support Personnel			
1. Economic Planning Division	<p>The division was responsible for the development of the first draft of the Five-Year Plan. Development of the draft required the involvement of staff from the farm management unit involved as members of the crops and livestock task forces. Staff of the Data Analysis unit who served on the Domestic Crops task force, the Macro planning unit involved in the overall coordination of five-year plan activities and staff from the Data Analysis Unit involved in the preparation and conduct of pertinent Five-Year Plan surveys. Intermediary accomplishments necessary for Five-Year Plan development are summarized below.</p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 33%;"> <p><u>Farm Management Unit</u></p> <ul style="list-style-type: none"> o Set domestic crops targets o Collected and calculated all major input for the Crops section o Collection of secondary data and other information for the preparation of livestock papers o Assisted in preparation and review of livestock papers including aquaculture, agriculture, smallstock, veterinary services, beef and dairy, animal breeding. Marine fisheries, pasture feed and nutrition, herd development tables and incremental yield figures. </td> <td style="vertical-align: top; width: 33%;"> <p><u>Data Analysis Unit</u></p> <ul style="list-style-type: none"> o Initiated post Harvest Waste Survey o Trained field staff for food consumption survey o Prepared paper on resource absorption for the crops sub-sector o Draft program Proposal for the crop diversification program for sugar cane lands. </td> <td style="vertical-align: top; width: 33%;"> <p><u>Macro Planning Unit</u></p> <ul style="list-style-type: none"> o Cash flow statements for the spices industry o Developed section for crops paper requirements o Resource absorption paper (land, labor, capital) o Collection of primary secondary data for the social and demographic issues task force o Preparation of the section dealing with Food Strategy issues o Compilation and analysis of Food Balance Sheet Data 1962-1973 o Collection and analysis of data on local consumption </td> </tr> </table>	<p><u>Farm Management Unit</u></p> <ul style="list-style-type: none"> o Set domestic crops targets o Collected and calculated all major input for the Crops section o Collection of secondary data and other information for the preparation of livestock papers o Assisted in preparation and review of livestock papers including aquaculture, agriculture, smallstock, veterinary services, beef and dairy, animal breeding. Marine fisheries, pasture feed and nutrition, herd development tables and incremental yield figures. 	<p><u>Data Analysis Unit</u></p> <ul style="list-style-type: none"> o Initiated post Harvest Waste Survey o Trained field staff for food consumption survey o Prepared paper on resource absorption for the crops sub-sector o Draft program Proposal for the crop diversification program for sugar cane lands. 	<p><u>Macro Planning Unit</u></p> <ul style="list-style-type: none"> o Cash flow statements for the spices industry o Developed section for crops paper requirements o Resource absorption paper (land, labor, capital) o Collection of primary secondary data for the social and demographic issues task force o Preparation of the section dealing with Food Strategy issues o Compilation and analysis of Food Balance Sheet Data 1962-1973 o Collection and analysis of data on local consumption 	<ul style="list-style-type: none"> o Data and Policy Advisor o Survey Methods Advisors o Training Advisor o Team Leader
<p><u>Farm Management Unit</u></p> <ul style="list-style-type: none"> o Set domestic crops targets o Collected and calculated all major input for the Crops section o Collection of secondary data and other information for the preparation of livestock papers o Assisted in preparation and review of livestock papers including aquaculture, agriculture, smallstock, veterinary services, beef and dairy, animal breeding. Marine fisheries, pasture feed and nutrition, herd development tables and incremental yield figures. 	<p><u>Data Analysis Unit</u></p> <ul style="list-style-type: none"> o Initiated post Harvest Waste Survey o Trained field staff for food consumption survey o Prepared paper on resource absorption for the crops sub-sector o Draft program Proposal for the crop diversification program for sugar cane lands. 	<p><u>Macro Planning Unit</u></p> <ul style="list-style-type: none"> o Cash flow statements for the spices industry o Developed section for crops paper requirements o Resource absorption paper (land, labor, capital) o Collection of primary secondary data for the social and demographic issues task force o Preparation of the section dealing with Food Strategy issues o Compilation and analysis of Food Balance Sheet Data 1962-1973 o Collection and analysis of data on local consumption 			

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Division	Accomplishments	IA Support Personnel
<p>2. Data Bank and Evaluation Div.</p> <p><u>Publications</u></p> <ul style="list-style-type: none"> o Monthly and quarterly crop forecasts o Agricultural input situation o Comparative domestic crop production and acreage 1981/1982 o Leaflet publications on import and export of various agricultural commodities and inputs o An updated list of publications o Baseline survey, small farmers credit project IFAD/BU, 1983 o Annual Report 1982 <p><u>Surveys Initiated</u></p> <ul style="list-style-type: none"> o Cattle Survey o Food Consumption Survey o Soil Survey Project o Coffee expansion Project 	<p>This division was active in the preparation of required and requested studies and in monitoring and evaluation activities. During this year important decisions were made regarding the Ministry's automation of the Data Bank and Evaluation Division.</p> <p><u>Data Request</u></p> <ul style="list-style-type: none"> o Estimates of domestic crop production o Export of agriculture products o Farmgate prices of domestic crops o Indices of domestic agricultural productions o Market prices of agricultural products o Census of Pig Farmers o Fertilizers and chemicals imported o Meat statistics o Poultry survey o Livestock feed production o Banana Survey Report o Crop calendar o Value of food and farm animals imported o Acreage of various crops o Projections of domestic agriculture productions <p><u>Monitoring and Evaluation</u></p> <ul style="list-style-type: none"> o Prepared twenty internationally and locally funded projects and programs o Activities contained in preparation for field survey aspect to the IVM project o Evaluation of IRDP o Data for the IDA/IFAD credit study analyzed and compiled for publication o Evaluation of soils activities at the Allsides, Olive River and Pilot Hillside sites completed. <p><u>Data Processing</u></p> <ul style="list-style-type: none"> o Equipment specification determined o Computer equipment ordered o 1,322 questionnaires edited and coded o Produced tables for Farmers Register o IDB/IFAD - 14 tables programmed and produced for raw data <p><u>Photo Interpretation</u></p> <ul style="list-style-type: none"> o Portland o St. Catherine Plains o Clarendon Plains o St. Elizabeths 	<p>IA Support Personnel</p> <ul style="list-style-type: none"> o Team Leader Advisor o Survey Methods Advisor o Systems and Programs Advisor

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A. L. NELLUM AND ASSOCIATES

Division	Accomplishments			TA Support Personnel	
	Local Courses	# of Participants	Overseas Courses		# of Participants
3. Training Div.	Business English and Report Writing	1	Systems Analysis and Design and Data Base and Design	1	o Training Advisor o Systems and Programs Advisor
	Supervisory Management	1	Fundamental Principles of Economic Forecasting	1	
	Survey Methodology	78	Case Study in Survey Methods, Workshop and Field Demonstration	2	
	Consistency/Correction (Program Package)	2	Establishing Data Bases and Analytical Systems for Agriculture The Use of the FPDAS System 400	1	
	Technology Transfer Policy in the Caribbean	1		2	
	Budget Preparation	1			
	Works and Soil Conservation	2			
	Stores	2			
	Auditing Course (3 day seminar)	10			
	Clerical Officer's Course	1			
	Home Economics	1			
	Integrated Surveys and Remote Sensing Development	1			
	Plant Protection	1			
	Cattle Survey Seminars	110 ?			
	Spanish	2			
	French	1			
	Reporting Writing and Supervisory Techniques	2			
	Interviewing Techniques, Concepts and Definitions	93			
	Time Management	18			
	Controls in D.P. System	2			
	SPSS	1			
	Programming Logic and Techniques	1			
	RPG	2			
Documentation Format in the Data Processing Unit					

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4.0

AGRICULTURAL PLANNING PROJECT IMPLEMENTATION PROBLEMS AND RECOMMENDATIONS

The problems faced by the Ministry in accomplishing its goals within the original time frame have been both managerial and programmatic. Programmatic problems which have impeded progress on the part of advisors were discussed in Section 2. Programmatic problems which are systemic to the Agricultural Planning Project and its role in the accomplishment of the Ministry goals will be discussed in this section. In addition, those management problems which affect the APP and are Ministry-wide will be discussed.

As a preface to this section, we wish to point out that the process of change--involving attitude adjustments, procedural adaptations, and technology transfer--is not easy to plan or schedule. The fact that we are engaged in a process means that activities are on-going and incremental. The fact that schedules were not accurately projected should not be the only criterion for assessing program success in this project. We believe that the fact that change has occurred, regardless of the rate, is a more useful measure.

Consequently, the problems described are not indications of failure so much as they are indicators that change is not taking place at the projected rate. With recognition and solution of these problems, the rate of change can be increased and may conform more closely to the original schedule. The fact that change has occurred and is likely to continue is amply supported by the productivity documented during the last seventeen months.

4.1 Managerial Problems

These managerial problems were identified from our experience and have been confirmed by the Ministry and US/AID through various letters, group discussions and evaluations. Some have been addressed and solved, others remain a problem which will continue to affect the project if not resolved.

4.1.1 Prioritization Throughout the Ministry Activities

The pressure on the top management of the Ministry is great, due to the competing demands for resources. Because managers compete for resources, the process of making decisions about allocation and fostering cooperation and coordination among division managers often requires lengthy periods of time. Sometimes decisions are simply not made at the top level and activities either are not initiated or are carried out without sufficient resources.

In cases where decisions are made, the decisions are often not relayed to lower levels. Consequently, the fact of the decision does not result in increased activity toward accomplishment of activities.

Regarding the APP, several activities should have been considered as Ministry-wide priorities because of their potential positive impact on all Ministry programs and the overall goals of the Government of Jamaica.

The development of the Five-Year Plan, establishment of the Data Processing Center, the conduct of certain surveys, the establishment of the Library System and the conduct and attendance of training courses are all examples of this problem. In each case, had these activities had a high priority and the prioritization communicated, all projects would most likely have been farther along in their actions and the Ministry would have been closer to the accomplishment of its goals and objectives.

The Five-Year Plan should have been the priority item two years ago. Had this been the case, several programs now under revision would not have had to waste time duplicating effort. Had the data processing center been operative by the end of the second year, several surveys needed by Agro 21, CRIES and the Ministry could have been published much earlier, thus placing these programs in a much better position to accomplish their objectives within schedule. Similarly, the Library System would have been able to provide greatly needed information to all requestors had it not been delayed. Finally, had training been prioritized at the top level for the Ministry, managers and other staff would have been better equipped to carry out their responsibilities and duties.

4.1.2 Recommendations

Having completed the development of the Five Year Plan, the Ministry must now take steps to institutionalize the use of the Plan as a priority planning tool. This will involve clarity of communication on both organizational and individual responsibility for implementation of the Plan and on-going assessment of the accomplishment of the Plan's objectives and goals.

4.1.3 Management of the Technical Assistance Effort

On too many occasions, technical assistance was not appropriately utilized. This resulted in costly project delays. Because of the inter-dependency of functions, these delays affected more than the accomplishment of a single goal; several goals were affected.

Short-term advisors often arrived to learn the activities prerequisite to their visit had not been accomplished even though we had been advised to the contrary. For example, plans had not been approved therefore implementation of these plans could not begin. The consultant would spend time getting approvals rather than consulting on implementation.

Other times the staff whom the consultant was to assist or work with was not available. Planned meetings would not take place. In some cases, staff had not been or could not be hired.

In the case of permanent advisors, their time was often misused. They attended meetings of questionable value for their role and responsibilities. They performed staff functions instead of advisory functions.

This mismanagement of consultants results from a lack of understanding of their roles and a shortage of resources. Often the shortage of



resources was a result of failure to establish priorities for resource allocation.

4.1.4 Recommendations

Planning for use of consultants, under this contract, and from other assistance efforts, will be improved greatly if the Ministry adopts and applies a policy which calls for specification of:

- the expected outcomes of assistance to be provided;
- a list (in sequence, if applicable) of activities involved and specification of individuals responsible for each,
- delineation of the level and source of the material, human and fiscal resources required for assistance to be effective; and
- communication and documentation of all necessary MOA approvals of assistance plans.

4.1.5 Lack of Resources

APP technical assistance staff often encountered lack of both human and material resources necessary to the accomplishment of their objectives. In some cases, training which had been designed and planned could not take place because staff was on leave or had not been hired. This was especially problematic in situations where on-the-job training was a big function planned for an advisor. The Survey Methodologist, for example, accomplished a number of his technical objectives, but was unable to effect the technology and skills transfer projected because staff were usually not available to work with him.

Lack of staff resources also meant that advisors were often working in an inappropriate vacuum. The input and information required to enable them to work efficiently and ensure the relevance of their activities and product to the need of the MOA were often missing. This resulted in some tasks requiring more time than originally projected, and the need to rework some products to incorporate MOA input late in the development process.

Lack of material resources also presented serious impediments to project assistants. This was especially true in the case of the Systems and Program Advisor since much of his 1983 scope of work was based on the availability of the IBM System/38 computer. As noted earlier, that equipment had not yet been installed at the time this report was prepared, rendering the advisor unable to provide the planned assistance in the application of the new computer to the data management needs of MOA. Similar problems were encountered by other advisors to the extent that one of them, the Audio Visual Advisor, was unable to provide any assistance at all during the course of the year.



4.1.6 Recommendations

Our recommendations in solving these problems are consistent with the major themes underlying this report--the need for a higher priority to be given to the APP within the day-to-day workings of the Ministry, and the need for careful planning regarding the use of advisor services. A higher priority for the APP will ensure that MOA staff take all steps possible to ensure that the human and material resources required by the Project are acquired and in place. More careful planning for use of technical assistance resources will ensure that advisors' work scopes reflect reality rather than "wishful thinking," thus preventing waste and inappropriate use of their expertise.

We also recommend that the unaccomplished technical assistance tasks which resulted from these problems be completed. The staff training and system design activities left undone because the lack of resources described above are essential to the relevance and usefulness of the APP as a whole and should not be abandoned because of schedule slippage and other resource difficulties.

4.1.7 Staff Turnover

The continued high rate of turnover among MOA staff posed the most serious threat to date to the institutionalization of the APP. Not only did turnover result in lack of staff resources described above, but it also resulted in the loss of carefully developed human resources. Staff with whom project advisors had worked extensively in both formal and on-the-job training settings left to seek more financially and professionally rewarding positions, taking with them the skills and commitment so critical to the Ministry's capacity for effective planning.

Staff turnover also played a pivotal role in the cycle of low morale among MOA staff. As skilled individuals resigned due to frustration and lack of resources, those left faced even greater burdens, thus further decreasing morale and encouraging more resignations. It is difficult for even the most skilled advisor to generate creativity and enthusiasm for innovation in such a work environment. ALNA believes that this problem may well be a key factor in the low priority given to the APP within the MOA. Planning seems like a costly luxury when so many "brushfires" need to be extinguished with so few resources.

4.1.8 Recommendations

The causes of high staff turnover in any work environment are usually systemic in nature and are not easily addressed through single steps. The challenge faced by MOA is to both decrease the frustration experienced by its skilled professionals and increase the incentives to become and remain an MOA employee. Some suggestions include:

- Steps to ensure that communication within the Ministry is accurate, consistent and complete;
- Revision of the personnel system to:



- allow for recruitment of qualified professionals based on job descriptions linked with required functions;
- linkage of pay increases and promotions with measureable work standards applied in regular documented performance reviews;
- revision and upgrading of the salary structure to compete more effectively with the private sector;
- bonding for personnel trained through GOJ resources to require them to continue to serve the Ministry for a specified period of time following training;
- contracting to the private sector of some tasks which MOA lacks staff or skills to accomplish.

4.1.9 Institutionalization of Planning

Staff of the Ministry have increasingly recognized the importance of planning in the conduct of their duties and responsibilities. Given the dual forces of shrinking resources and higher demand for services, staff are utilizing planning to increase their productivity.

In the past, pressure for planning has flowed upward from lower level staff towards management. Strategies must now be employed to reverse this phenomenon so that planning pressure vectors are in the same direction as the authority vectors--downward. Productivity increases only when these forces flow in the same direction.

The Five-Year Plan serves as an indication of the Ministry's top management's commitment to planning. It will provide the conceptual framework of Division and unit-level planning. However, the plan alone will not routinize planning.

The institutionalization of planning as a pertinent day-to-day management tool will require a process of monitoring and evaluation that becomes rudimentary. It will require training of staff and understanding on the part of staff that their performance will be evaluated regarding their skill and commitment to planning.

4.1.10 Recommendations

The first step in the implementation of the Five-Year Plan will be to train managers and supervisors on its use and implementation. We recommend training in planning and evaluation techniques. We believe that all Ministry managers from the top to the bottom could benefit from a refresher course of this nature. It is our experience that managers and supervisors need to periodically review the fundamentals of planning which are applicable for day-to-day activities.

Once this training has been delivered, managers and supervisors should be held accountable for their use of planning techniques in the exercise of their duties. Criteria should be placed in their performance standards so that recognition can be made for this skill and commitment to the planning process.



Finally, monitoring and evaluation systems should be designed and implemented to assure on a regular basis that all levels of the Ministry are engaged in and contributing to the overall process of the Five-Year Plan implementation.

4.1.11 Manpower Issues within the Ministry

Noncompetitive salaries have served as a major barrier to institution building. Unfilled positions due to staff leaving the Ministry have resulted in duplications of effort and loss of opportunity regarding capability enhancement.

Surveys were cancelled which would have provided wonderful learning opportunities for staff had staff been available to conduct the surveys. Loss of productivity has resulted because persons trained to perform services have left and thus time was devoted to building capability in a new team when this time could have been spent more effectively.

Noncompetitive salaries contribute to both of these problems-- staff leaving and the time required to fill vacant positions.

4.1.12 Recommendations

These problems are Government-wide and thus beyond the absolute control of the Ministry. However, there are a few examples of consultancies and exempt positions that suggest solutions to these problems.

We recommend that the Ministry conduct a survey of key positions-- positions that will be essential to the accomplishment of its goals. These key positions should then be connected to consultancies. The consultancies should be for the period of time that they are considered essential.

This strategy will serve the short term need of increasing productivity which is planned to increase revenue of the country. The increased revenue could solve the long term problem of noncompetitive salaries. With greater revenue, the Civil Service Commission may be authorized to increase the salary rates.

4.2 Programmatic Problems

A number of technical, or programmatic, barriers to the accomplishment of APP objectives also arose during the course of the third year of the technical assistance project.

4.2.1 Lack of Valid, Timely Data for Economic Planning

MOA is continuing to experience problems in collecting and generating the data needed to produce reliable planning estimates and targets in such areas as crop production, land utilization and manpower training needs. This has posed a problem in the development of the Five-Year Plan, and will continue to hinder the MOA's ability to evaluate progress against objectives and modify the plan to address changing economic and technological circumstances.



4.2.2 Recommendations

Our recommendations in this area relate directly to our suggested solutions to the management problems discussed above. In most cases, data are not available because the skilled professionals needed to generate them are not available. MOA must beware of the danger of misinterpreting the idea of software "packages." Packages are not magic. They are tools which make a task easier and more efficient, but highly skilled people must instruct the packages on what to do and how to do it.

Thus, we wish to reinforce the recommendations made earlier in this section, and in Section 2.0 of this report, regarding the need for training of MOA staff in the use of computer hardware and software within the context of the Ministry's needs.

4.2.3 Increased Demand for Information

Since the inception of the APP, the Ministry's requirements for information and data processing have grown faster than the capabilities of MOA equipment and human resources. Policy management and evaluation requires rapid access to information. Other public and private sector organizations are making routine use of MOA data for their own planning purposes, and a range of Ministry Divisions require assistance in the areas of statistical methods or automated data processing.

The APP technical assistance team has recognized and addressed these problems through a detailed assessment of MOA's computer needs and the development of recommendations on the hardware, software and staff configuration most suited to current and future MOA requirements. The price of this exercise has been a delay in the schedule of the project. It is always time consuming to "change horses in mid-stream." But, if one's horse proves unable to carry the burden, the time is worthwhile.

4.2.4 Recommendations

The MOA currently anticipates that its new computer system--the IBM System/38--will be installed by mid-summer. It is imperative that, at that point, the project pick up where it left off--developing within the MOA the skills and materials necessary to maximize the benefits of computer resources. The assistance required will include staff training in: systems design, applications and documentation; programming and program testing; development of users' manuals; statistical methodology; and training of new and developing staff.

Continued growth of centralization of MOA's data processing capability will also serve to increase the Ministry's ability to coordinate and monitor data processing activities and resources. Finally, the implementation of previously described recommendations on reduction of staff turnover will also serve to enable MOA to meet its data processing requirements with a stable and highly skilled cadre of professionals.



4.2.5 Centralization of Training

Even though it is the stated aim of the Ministry to centralize training in the Training Division on too many occasions decentralization has been allowed. This has resulted in wasteful duplication of training resources and has served as a barrier to Ministry-wide planning in this area.

During the past two years, training planning has been haphazard at best. This is due primarily to the fact that the "Master Training Plan" was not a product based on a valid needs assessment. Some divisions did not contribute to the needs assessment or were careless in the preparation of the submission because it was their intent to conduct their own training.

4.2.6 Recommendations

The Master Training Plan is now undergoing review in light of the Five-Year Plan and the realization that the first plan is not reliable.

We believe that steps should be taken to ensure that all divisions understand that training will be centralized in the Training Division and no training will take place unless authorized by the division.

If the Permanent Secretary mandates centralization, then the second "Master Training Plan" will have a better chance of being valid and thus a useful planning document.

4.2.7 Centralization of Automatic Data Processing

The delay in gaining a design for the purchase of data processing equipment can partially be blamed on Divisions desiring that data processing be decentralized. We believe the Ministry made the correct decision to centralize for reasons of quality control, cost reduction, and priority setting. However, the Ministry should hold fast to this decision and not let special projects undermine this decision even though they may have funds for equipment.

Given the demand for information services from the Ministry, there is no possible way to coordinate service delivery if each unit has its own equipment.

4.2.8 Recommendation

Currently, two units have requested computers. We recommend that they be allowed to lease until the Data Processing Unit has its computer and then after they should use this unit.

If each Division develops computer capacity, there will never be enough funds to buy a system large enough to handle the needs of the Ministry and the Ministry will lose control over APP and not be able to set priorities for work to be accomplished regarding Ministry-wide activities.

