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FINAL REPORT
AGRICULTURAL PLANNING PROJECT

Submitted under Contract No.:

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ALNA No. 201

Submitted to:

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July 23, 1984



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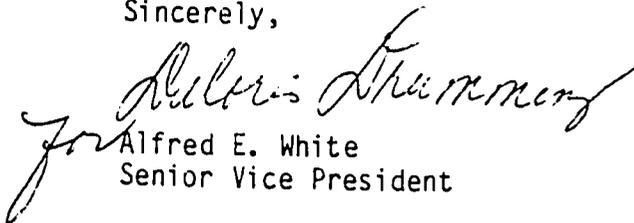
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Dear Mr. Sloshtower:

A. L. Nellum and Associates, Inc. (ALNA) is pleased to submit three (3) copies of this Final Report on our contract to provide technical assistance to Jamaica's Ministry of Agriculture in the implementation of the Agricultural Planning Project. The Report addresses the major findings and recommendations which emerged from this three and one half year effort.

On behalf of ALNA and our entire team of APP staff and specialists, let me express my appreciation for the opportunity to participate in this important project. We hope to be working with you again in the near future.

Sincerely,


Alfred E. White
Senior Vice President

Enclosures

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EXECUTIVE SUMMARY

This document represents the Final Report of A. L. Nellum and Associates (ALNA) on a three and one-half year project which provided technical assistance to Jamaica's Ministry of Agriculture on the implementation of a major Agricultural Planning Project (APP). Supported by the U.S. Agency for International Development (AID), the APP was designed to effectuate the increased efficiency of Jamaica's agricultural development system and its activities through appropriate technology transfer.

During the course of the contract, a number of technical and administrative documents were produced to record project problems and successes, and to inform AID of ALNA's activities and recommendations. Among those were two annual reports--one for Years 1 and 2, delivered in December of 1982, and the other for Years 3 and 4, delivered in June of 1984 upon completion of the project. The purpose of these documents was to provide detailed information on the accomplishments of the technical assistance effort during the reporting periods, and to document in-depth technical and managerial recommendations for improvement of subsequent APP activities.

This Final Report does not attempt to duplicate the contents of the annual reports. Rather, its purpose is to capture and discuss the major thematic issues which encompassed the implementation of the APP, and the major barriers and resources encountered by ALNA and its staff and consultants in assisting the Ministry to conduct the Project. For those readers interested in detailed information on Advisor activities, contract administration and technical recommendation, this document should be read in conjunction with the annual reports mentioned above.

The Final Report consists of three sections. Section 1.0 provides a review of the APP, including its goals and objectives, a summary of accomplishments, and a discussion of the environment in which the Project has been implemented since its inception. Section 2.0 delineates the primary lessons which ALNA feels have been learned since the Project was started. This includes discussions of the policy/managerial lessons learned by the MUA, the AID Mission in Jamaica, and the contractor, as well as presentation of the major findings of the technical advisors.



Section 3.0 presents a summary of the major recommendation which have evolved from the technical assistance process. These recommendations are divided into two groups: policy/managerial issues, and areas in which future technical assistance will be required to ensure successful accomplishment of the goals of the APP.



1.0 REVIEW OF PROJECT

This section of our Final Report presents a discussion and analysis of the origin, goals, and evolution of the Agricultural Planning Project and a summary of accomplishments. We also present our assessment of the impact of the various organizational and environmental contexts in which the project has functioned, and discuss the implications of those contexts on ALNA's approach to successful completion of contract requirements.

1.1 Agricultural Planning Project Rationale

Throughout the decade, the deteriorating effects of Jamaica's economy have been evident: the declining investment and spending in tourism and mining; the increasing costs of petroleum and imported goods; the downturn in employment and the building trades; and the rising patterns of criminal and violent acts. Agricultural work programs and fiscal strategies did not result in solutions to the balance of payments deficits. In fact, Jamaica suffered a negative net reserve position, lacked investment capital, and experienced great fiscal deficits; not to mention decreased agricultural and industrial production, compounded by a reduced gross domestic product (GDP).

The lack of growth in the agricultural sector over the past decade has been a major cause of Jamaica's increasing unemployment, high inflation rates, foreign exchange shortages, high rural to urban migration, lower living standards, and emerging nutritional problems, according to the Ministry of Agriculture (MOA). These findings were substantiated by the World Bank as well as subsequent MOA studies.

One of the most blatant marks of an underdeveloped economy is low productivity, and Jamaica has shown all of the qualifying signs. Jamaica, for example, has experienced a dynamic shift politically which has caused a wave of impact throughout its culture and economy. Many strengths are observable but many problems are also caused by the state of affairs. Chief among the problems which have directly affected the economy is the earlier great wave of "out" migration by professional and skilled manpower. Consequently, a dire economic situation exists, one which has been characterized by inflation and a lack of foreign exchange. The agricultural sector has probably experienced more negative impact than other sectors. However, efforts to reduce poverty, increase the supply of basic food and the



necessary raw materials, and to utilize a massive number of the Island's people in the growth process have begun.

In response to the obvious problems which stem from the depressed economy, the Government of Jamaica (GOJ) has, through its Ministries, made commitments to programs which address the continued economic, social, educational, and agricultural development of the country. Initiatives have been developed to address basic needs of the communities of Jamaica at-large. The Agricultural Planning Project (APP) is one such effort undertaken by the Government of Jamaica. Under the leadership of the Agency for International Development (AID), the United States' bilateral development and security supporting assistance has been administered to less developed countries, and in this instance to Jamaica. The ultimate end desired is the improvement of the human and economic resources, the productive capacities, and the quality of life for a significant percentage of the Jamaican people, in such a way that political and economic stability is the result.

In order to bring about this effect in the agricultural sector, the Agricultural Planning Project was initiated in 1979. A number of important outgrowths for Jamaica were expected: the capacity to supply basic chemical and mechanical technology and information to the agricultural sector in forms and ways that farmers understand most; development of a basic infrastructure designed to make the greatest progress in marketing goods; and the establishment of work for its people.

Certain barriers existed in the country which needed to be overcome for the ultimate success of the GOJ's Agricultural Sector Strategies and the Five-Year Development Plan (1978-1982). The most important of these were transfer of technology in the agricultural sector; trained personnel; equipment and resources; a system for planning, analyzing, and forecasting events and results--leading to a balanced economy with timely crop, live-stock, marketing, and extension information. The intent of the Agricultural Planning Project was to correct these deficiencies and lead the way to increased agricultural production for domestic consumption and for export.

1.2 The Mission, Goals and Objectives of APP

Less than a decade ago, the GOJ established several agricultural development goals which were cited in a Green Paper:



- o To increase rural incomes and improve rural amenities and social infrastructure as a basis for raising the standard of living of the rural population;
- o To ensure that all agricultural land is retained and used in as efficient a manner as possible;
- o 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;
- o To produce as much food and raw materials as is economically feasible to meet domestic food and nutrient requirements, to increase exports of traditional crops, and to develop new crop exports; and
- o To structure agricultural production to reverse the growing reliance on imported commodities.

The GOU agricultural sector goals, contained in the GOU's Five-Year Plan, were to

- o Produce food and raw materials to meet requirements for domestic food consumption at satisfactory nutritional levels;
- o Increase the number of agro-industries; and
- o Expand exports while reducing dependence on imports.

The Agricultural Planning Project was designed specifically to help the Government of Jamaica and Ministry of Agriculture to achieve the aforementioned goals by providing hardware and effectuating appropriate technology transfer. Recognition has been given to shortages in skills, personnel, management, and business acumen, in addition to recognizing shortcomings in the GOU's ability to prepare and implement projects.

1.3 The Mission, Goals, and Objectives of ALNA's Technical Assistance Contract

A. L. Nellum and Associates, Inc. was specifically contracted in December 1980 to provide 3 1/2 years and a total of 90 person months of technical assistance to the Ministry of Agriculture in the following specific areas:

- o Training technical assistance;
- o Computer systems and programming training and technical assistance;
- o Data and policy analysis;



- o Statistical survey methods;*
- o Evaluation methods;
- o Library systems installation; and,
- o Audio-visual aids installation.

The Project Paper detailing the Jamaican Agricultural Planning framework identified the project goal and purpose as follows:

- o "Provide increased MOA technical, planning, administrative and logistical support for the Jamaican rural/agricultural sector effort to improve production and incomes at all sector levels, especially the small farmer."
- o "The purpose of the project is to increase the institutional capability of the MOA to collect, organize and analyze relevant data; upgrade its level of personnel, both quantitatively and qualitatively; improve its administration and management; identify and satisfy its ongoing training requirements; and utilize these factors effectively to meet the stated project goals."

The ultimate result of Technical Assistance in the APP was also projected to include the outcomes listed below:

- o The MOA will have absorbed additional trained permanent staff professionals and satisfactorially upgraded the capabilities of other existing professionals.
- o The MOA will have increased its permanent data handling capacity through computer availability, data storage and retrieval capacity, and trained personnel on board.
- o The MOA will have significantly augmented its general management and specialized training systems capacities.
- o The MOA will be using the information from the equipment, personnel, and systems improvements made under the project in designing sound plans and policies to benefit the rural/agricultural sector in general and small farmers in particular.
- o The MOA will have increased capacity to conduct needed agricultural surveys.

1.4 Summary of Accomplishments

During the course of the Technical Assistance contract, ALNA staff and consultants provided over 1,580 days of support and assistance to the

* The Statistical Survey Methods Specialist function was added to the technical assistance contract in a modification.



APP. In spite of the problems encountered during project implementation, each of ALNA's overall technical assistance goals was accomplished to a large degree. The capacities of MOA's personnel, equipment and planning procedures have been significantly improved through the application of appropriate technology transfer strategies.

The general accomplishments of Technical Advisors in the major programmatic areas addressed by the technical assistance effort include:

- o Project Management served as liaison with the Rural Development Officer of US/AID and the Ministry. In that capacity, contract leadership 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. The contract also served as a coordinator among MOA Divisions and Branches, preventing duplication of effort and reinforcing the centralized planning system of the Ministry. Project Management developed and monitored a technical assistance implementation plan for the overall contract.
- o In the area of Training, ALNA staff 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 an automated Skills Inventory System for the Ministry. We also assisted in identifying appropriate placement for U.S.-based training schedules and course outlines.
- o In the Systems and Programs areas, ALNA provided technical assistance and consultation in the 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. A survey of the computer utilization and needs of the entire Ministry was conducted. We also developed software for use in nationwide agricultural surveys and provided training in a variety of systems design and documentation skills. A number of staff papers and workshops were provided in the application of computer technology to MOA's planning and management needs, and software development standards were designed for the Ministry's Data Processing Branch.



- o In Data and Policy, we provided input and coordination assistance to the development of the Five-Year Plan, the completion of which marks a major milestone for the APP. ALNA advisors 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.
- o In the area of Survey Methods we focused on the redesign of the MOA's quarterly Crops Production Survey which was discontinued in 1980. We prepared proposals on revisions of area frames, sample selection and development of survey materials. We also prepared recommendations on coverage evaluation of previous surveys and provided assistance to MOA staff as needed. Working papers were developed on a range of issues relating to the structure and operations of the Data Collection and Statistics Branch. ALNA also participated in the design and implementation of the Special Banana Farmers' Survey and the Food and Beverage Consumption Survey.
- o In the area of Evaluation Methods, ALNA consultants served as a primary resource on the review and refinement of APP goals, including the conduct of the first annual APP review. We introduced evaluation methods to effectively monitor MOA progress, conducted evaluation training programs for officers and administrators of the Training Division and developed a revised Log Frame for the entire APP. An indepth evaluation of the management system of the second Integrated Rural Development Program was also conducted.
- o In Library Systems, we worked with MOA to develop an overall conceptualization for the Ministry's Library Information System and Learning Resource Center. After conducting a requirements analysis for the information needs of the APP, we 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.



- o In the area of Audio-Visual Technology, we conducted an in-depth analysis of the role of the Ministry's Learning Resource Center in training of MOA personnel. We analyzed the Center's equipment and facilities needs, developing detailed recommendations in both of these areas. We also conducted workshops for MOA staff in instructional design.

1.5 Implementation Environment

At the time the APP Technical Assistance contract was awarded, the APP itself had already been underway for a full year. The technical assistance proposal and program plans had been based on some assumptions, drawn from the Project Paper and other AID and MOA source documents, which had proven inaccurate during the initial year of the APP. The inaccuracy of those assumptions was to have significant impact on the implementation and accomplishments of the technical assistance effort. These factors are described in detail below.

1.5.1 Advisors' Relationships to Counterparts

ALNA originally structured the role of technical assistance Advisors--both short and long term--to involve a fairly high degree of autonomy. While these experts would answer directly to the project Team Leader, thereby ensuring coordination and quality control of the overall technical assistance effort, they were also expected to be able to work closely with MOA counterparts in day-to-day technical and skills transfer activities. This structure was viewed as ensuring that the advice and assistance provided were directly related to the needs and concerns of the immediate user.

However, this counterpart-oriented role for our advisors did not prove to be realistic. The reader will note that the issues of staff turnover and inadequate staffing patterns are frequently cited throughout this Final Report. Perhaps the most basic impact of these problems on the implementation of the technical assistance project was that, in many instances, they prevented ALNA staff and consultants from functioning in a truly advisory capacity. In some cases, no counterparts were in place to receive the benefit of the assistance available. In other cases, identified counterparts lacked the technical backgrounds and/or bureaucratic authority to take full advantage of the Advisor's presence. This also resulted in a



lack of sufficient priority and resources for scopes of work and inability to effectively follow-up on Advisors' recommendations.

In the final analysis, ALNA project team members often wound up functioning as MUA staff, supplementing personnel shortages rather than transferring skills to counterparts. This problem, to a certain extent, interfered with the technical assistance objective of transferring skills, knowledge and technology to MUA staff, thus ensuring the institutionalization of the project outcomes. It also called for significant modifications to the roles of the Advisors and of the Team Leader. These changes will be discussed in detail in subsequent sections of this Report.

1.5.2 Work Accomplished Prior to TA Effort

We also anticipated that some progress on certain APP tasks would be completed before our Advisors began work on the technical assistance effort. For example, the Training Advisor was to have been able to use a virtually completed MUA Skills Inventory as a guidepost for redesign of the Ministry's training activities. The Data and Policy Analyst also anticipated completion of preliminary assessments and plans in the area of data management.

In reality, our Advisors entered a situation where slippage had already occurred in several areas of APP schedule projections for products or milestones. In some cases, this resulted in delays to our schedule. In others, it resulted in ALNA Advisors actually performing the work required to enable them to address their assignments. We were also, at times, able to "work around" the areas impacted by this scheduling problems.

1.5.3 MUA Preparation for Advisors

The APP Technical Assistance contract was structured, scheduled and organized with the assumption that the Ministry was prepared to utilize and support skilled Technical Advisors in the areas outlined in the Request for Proposals and the Project Paper. In reality, little or no planning for the roles and resource requirements of Advisors had occurred in some cases. This resulted in problems ranging from lack of MOA clarity about Advisors' scopes of work, to Advisors arriving in Kingston to discover that the administrative paperwork required to enable them to complete their assignments had not yet been completed. In some cases, such basics as office space and furniture were not provided to new Advisors due to inadequate planning.



The natural results of these problems were confusion, inappropriate use of Advisors' time on administration tasks and, in some cases, slippage in schedules. In at least one situation, the Advisor was unable to begin his scope of work because his activities had not yet received internal MUA approval in spite of the fact that AID/J had issued a Call Forward.

1.5.4 Availability of Project Documentation

ALNA planned Advisors' activities with the assumption that documentation of MUA activities prior to the APP and during the initial year of the project operation would be available. These source documents were to provide rationales, hard data and histories to support current APP and technical assistance operations.

In fact, Advisors were almost universally confronted with inadequate or inaccessible documentation. Most files and references over one year in age were lost due to the lack of storage/filing systems. High staff turnover often compounded this problem because employees' files were misplaced upon their departure, thus depriving MUA of both documentary and human records of critical project operations.

2.0 LESSONS LEARNED

Through the approximately 3-1/2 years of operating the APP Technical Assistance Contract, a number of valuable lessons were learned by all parties involved in the project. The purpose of this section is to delineate those lessons and their implications for the past and future activities and strategies of the project. The section organizes these findings according to their primary focal point--the Ministry, AID/J and ALNA. This discussion is followed by a delineation of specific technical findings of the various advisors who worked on the contract.

2.1 Policy/Managerial Findings

2.1.1 Ministry of Agriculture

Because the MOA was the main arena in which advisors functioned throughout the course of the project, a significant number of the lessons learned relate to the operations and policies of the Ministry.

2.1.1.1 The Agricultural Planning Project Was Not a Top MOA Priority

Many national governmental agencies in both industrialized and developing countries are organizations that are geared to respond to crises rather than preventing them. Jamaica's Ministry of Agriculture is no exception. The result of this familiar pattern was that, as MOA placed high priority on putting out the "brushfires" caused by economic, political and technical changes, inadequate attention was given to the planning system which could prevent such problems in the future.

It is also true that, as the implementation of the APP continued through the years, other new projects were developed which were given higher priority. This, too, is a frequent organizational pattern. Newness and novelty arouse more interest than older, more familiar and, therefore, less stimulating projects.

This lack of priority was operationalized most visibly, and most destructively, at the highest level of the Ministry. Because the scope of the APP required the involvement of every Division of MOA, only the Permanent Secretary has the necessary span of control to oversee and coordinate project activities. Because there was no designation of formal on-going authority to manage the Project, there was inadequate capacity to



both garner the human, fiscal and material resources required and to ensure the high priority of the completion of Project tasks.

While this problem was serious during the development of the Five Year Plan, it may well become critical as the plan is implemented and continually evaluated. Only through the use of the Plan as a flexible guide to the operation and assessment of the Ministry will the investment of AID/J and the MOA in the Project be realized. The implementation of the Plan will require higher levels of priority and coordination than did its development.

2.1.1.2 Staff Turnover Presented a Major and Unexpected Barrier to Technology Transfer

It is difficult to transfer knowledge, skill and experience to an organization with a high staff turnover. In such a situation, the direct recipients of Advisors' assistance are often on their way out of the agency--taking with them the benefits of the technology transfer process--or too new and inexperienced at their jobs to take full advantage of the Advisor's expertise. Thus, the goal of institutionalizing the APP through carefully planned and applied technology transfer was seriously hampered by the high turnover of MOA personnel.

Staff turnover also presented a frequent barrier to the ability of Advisors to acquire the information they needed to do their jobs. Given the inadequate filing and material storage systems of the Ministry, it was unfortunate that, all too often, the person who could find the files or answer the question had also left the employment of the Government of Jamaica. Some Advisors returned with the concern that a similar fate awaited the knowledge and products they had left behind them.

2.1.1.3 There Was Insufficient Priority Given to Institutionalization of Planning

Effective organizational planning is a "top down" process. That is to say, planning begins--both as priority and process--at the top of an organization and flows down to the lower layers of the bureaucracy in a controlled and focused manner. In this way, the importance of planning and the resulting procedures for ongoing planning and assessment are institutionalized throughout the organization.

The APP was designed and developed in recognition of a lack of effective comprehensive planning at the top level of the MOA. Thus, the



need for skill development in management of organizational planning and change was anticipated by all parties involved in the APP and the Technical Assistance Contract. What was not anticipated was the lack of recognition of these developmental activities as a priority throughout the Ministry.

The APP was planned with the assumption that it would be perceived as a critical project throughout its implementation. The goals, schedules and resource allocations of the effort were established accordingly. The lack of comprehensive planning at the top levels of the Ministry resulted in ambivalence and confusion about the Project at its lower levels. For example, training sessions which were key to the Ministry's capability to implement the Project were often poorly attended because they had not been presented as a priority. Administrative paperwork needed to facilitate Advisor's assignments and acquisition of needed resources was sometimes not completed in a timely manner.

This situation resulted in a number of shifts in the internal schedule and priorities of the Technical Assistance Contract. Perhaps most important, our staff found themselves in a position where they almost had to "sell" the Ministry on the importance of the APP in order to accomplish their mission. And, as noted earlier, our Advisors often had to do the work of the Mission staff due to unfilled positions or unavailability because of other priorities.

2.1.1.4 The Project Faced Serious Shortages of, and Competition For, Resources

The lack and misutilization of resources evolved into a serious barrier to the Project. We are aware, of course, that the entire Mission is functioning under severe resource constraints. However, it seemed at times that newer projects were able to compete more successfully than the APP for those resources that were available. As a result, the APP was functioning against a serious lack of human, material and fiscal resources in about every Division in the Ministry.

At the same time, we discovered that some resources were being underutilized. This was especially true in such areas as data processing where the function was designed as a centralized one requiring a high level of skills and human resources to be functional. In such situations, equipment was more available than was the skilled manpower needed to operate it--resulting in an underutilization of the equipment.



In response to these problems, ALNA's project team began evolving a series of recommendations for a "distributive centralized" approach to resource distribution. This approach allows for centralized functions where they make the most economic and programmatic sense, but also includes direct accountability between user and resource ensuring that the centralized function is both responsive to users' needs and utilized in a technically appropriate and cost-effective manner.

2.1.1.5 Ineffective Use of Technical Assistance Was Often Problematic

Shortly after ALNA began work on the Technical Assistance Contract, it became clear that the MOA was highly inexperienced in the use of technical assistants. The most frequent symptom of such inexperience was the request that Advisors serve in a staff capacity within the Ministry, rather than an advisory one, supporting and training incumbent staff in their various job functions. Examples included use of advisers to assure that surveys were continued as planned and to write data analysis programs.

We also found little structure in planning for the use of our Advisors. Goals and objectives for assistance outcomes were seldom set or monitored, meaning that little evaluation occurred on the part of the Ministry. Schedules were often not set or not adhered to. Little advance attention had been given to the human, material and financial resources that would be required to enable the Advisor to fulfill his/her scope of work. And, there was frequent inattention to follow-up recommendations so that Advisors would often return to the Ministry for a second or third technical assistance visit to discover that much ground had been lost because of failure to follow-up on interim requirements.

Had this contract been one that was product-oriented, these problems would have been more easily dealt with. Our Advisors could have functioned with relatively little consistent contact or support from MOA. But the focus of this contract was a process--the transfer of skills and information from one person (or organization) to another. Thus, the inadequacy of the Ministry's planning was a serious impediment to our ability to accomplish our overall goal.

2.1.1.6 The Project Needed to Shift Its Focus in Staff Skills Development

When the APP was originally designed and the Technical Assistance Contract was developed in response to the Project's needs, it was antici-



oped that staff skills development activities would be focused on the middle level of MOA management and technical staff. There, it was thought, the Ministry could benefit from the increased capability of its staff to both carry out the planning mandate of its top administrators, and to train and guide more junior staff in the prioritization and application of solid planning principles.

In reality, the greatest and most immediate need for training was at the top level of the Ministry. As noted earlier, effective planning is a "top down" process, requiring skills and commitment at the highest levels of an organization to flow down to the middle and lower areas of operation. In the absence of such skills and commitment at the top of the MOA, the contract was required to shift its assistance focus to this level in order to promote the necessary prioritization of the APP, and the lateral and downward flow of the necessary skills and attitude.

2.1.1.7 Activities Reporting to AID/J Was Inadequate

The APP was a fairly massive effort which impacted every technical and administrative unit of the Ministry of Agriculture. A major problem which impacted the overall accomplishments of the Project was the inadequate flow of relevant information within the Ministry itself and from the Ministry to the AID Mission. The result of this communication gap was that the Mission often made management and policy decisions without the benefit of a full range of current information.

During the initial years of the contract, ALNA was reluctant to create conflict between MOA and AID--by reporting to the Mission in areas that were outside our scope of activity. As a result, we noted or experienced a number of problematic patterns of communication and decision making. For example, at the time the Mission was determining its position on the centralization of the Ministry's data processing function, a number of MOA Divisions were individually negotiating to obtain their own computer equipment. Had AID been informed of this by the Ministry, it would have had a broader perspective on which to make this judgement.

Similarly, when a decision made by the MOA to use non-contract funds to hire another Advisor for the Training Division, the Mission would have been able to make a more thoughtful decision on the use of the current Training Advisor had they been informed of this change prior to its implementation.



The MOA also made several changes in the policy and direction of the APP which were not communicated in a timely manner. For example, MOA's decision to forego development of the Five Year Plan had been in execution for 6 months before the Mission was informed by MOA. As a result, they were unaware for that time that the activities of our Data and Policy Advisor were not being directed at the Five Year Plan even though that Advisor's reports accurately presented his activities.

The solution to most of these communication problems lies in the development and application of a consistent and effective communication system within the Ministry.

2.1.2 Mission

Upon examination of the role of the AID Mission in Jamaica in the development of the APP, and the implementation of the Technical Assistance Contract, several important lessons emerged which should be considered by AID regarding future APP activities.

2.1.2.1 There Was a Distinct Change in the Mission's Managerial Philosophy and Style

Up until Spring of 1983, the USAID Mission had adopted what might best be termed a non-directive style of management toward the APP (and other projects as well). This approach resulted in infrequent and unfocused monitoring of the Project and its progress, as well as inconsistent levels of communication between the Ministry and the Mission.

About three years into the implementation of the APP, the Mission initiated a distinct change in management style. Shifting to a very directive posture, the Mission began to require a high level of reporting and accountability from the Ministry. While this change was appropriate in light of the needs of US/AID to ensure appropriate and effective use of its resources, it was also abrupt and sudden. No period of transition, during which both organizations could examine and prepare for new requirements, was allowed.

Most importantly, there was no clear articulation of reporting and accountability requirements from the Mission to the Ministry. While it was clear that the Mission's oversight of the APP was to be more firm and more directive, the specific performance criteria to be imposed on Project activities and the specific reporting requirements to be imposed on the Ministry were not clarified.



Based on our observations, what is needed is a relationship between these two agencies that may best be described as a mutually accountable partnership. For the APP to accomplish its goals, both the Mission and the Ministry must play key administrative, policy making and evaluative roles. Through a joint process of identification of, and agreement on, these roles, both agencies could establish the type of cooperative accountability and monitoring structure most likely to enhance APP implementation and success.

2.1.2.2 There Is a Need for More Timely Administration of the Contract

A major problem which ALNA encountered during the implementation of the Technical Assistance Contract was the very slow response time of the Mission in the execution of contract amendments, transfer of funds and requests for Advisors. This was especially problematic in light of the high degree of flexibility required to address the problems described in this section of the Report. Shifts in schedules and in the allocation of human and fiscal contractual resources was essential if we were to accomplish our mandate in spite of the unexpected barriers encountered.

When the administrative steps required to facilitate those shifts were subject to delays, everybody paid a price. The Ministry sometimes had to function without much-needed technical support; ALNA often expended money which was slow to be reimbursed, thus creating cash flow problems for the corporation; and, the Mission was creating barriers to the efficient implementation of one of its own projects.

In a situation fraught with unexpected problems, resource shortages and admittedly inadequate administrative capability on the part of the recipient of AID support, it behooves the Ministry to take every step possible to ensure that it does not add to the already high level of barriers to the accomplishment of the APP's goals.

2.1.2.3 The APP's Level of Visibility and Priority Decreased at the Mission

At the beginning of the APP, the ongoing administration of the Project was shared between the Project Manager and the Mission's Deputy Administrator. This placement ensured that the project received sufficient visibility and priority within the Mission to obtain the support and resources needed.



As of about two years ago, however, the APP recovered to become the exclusive domain of the Project Manager. This shift, which symbolized both to the Ministry and to ALNA a decrease in priority, has probably been a major cause of the lack of clarity and responsiveness with which AID has, at times, dealt with the Project since the change. Monthly meetings, which were once attended by the Deputy Administrator for exchange of information on problems and accomplishments, became meetings between the Team Leader and the Project Manager only. Decisions made about the APP and the contract seemed to carry less weight--they were carried out in a less aggressive and less timely manner.

As noted earlier, the APP is now entering what may well be its most critical phase. The systematized implementation and monitoring of the Ministry's newly completed Five Year Plan will constitute the institutionalization of effective planning within the MOA. It is, therefore, most advisable for the Mission to consider returning the ongoing responsibility for the Project to the Deputy Administrator level.

2.1.2.4 The Role of the Team Leader Was Underestimated

At the time the APP was originally conceptualized, it was felt that the role of Team Leader would involve some administrative responsibility, but only minor levels of technical oversight and coordination. This was mainly based on the assumptions that Advisors would be able to function relatively autonomously with well-qualified MOA counterparts, and that the Project would be an on-going high priority for both the Ministry and the Mission. As discussed earlier, neither of these assumptions proved to be accurate.

Because of these projections, however, the role of the Team Leader was combined with that of the Training Advisor. A person with strong training design and delivery skills, as well as experience in project administration, was recruited to fill the combined position, and approved by the Mission.

The unexpected isolation in which many Advisors found themselves functioning, coupled with the increasingly lower priority attached to the Project by MOA and the Mission, placed two sets of unexpected demands on the Team Leader. First, this manager needed to be able to "sell" the Project to the top administrators of the Ministry. Second, the technical



assistance effort required significantly more technical coordination and oversight than had been anticipated.

Both of these general functions required a strong technical background in agricultural planning--a qualification which our Team Leader did not possess because it had not originally been required. In the area of Training, this persons' performance was more than satisfactory. However, the Team Leader function became increasingly problematic. It was obvious to us that the combination of misdirected qualifications and the rapidly increasing volume of work required of the Team Leader to respond administratively to changing contractual requirements, called for a change.

In late 1982, we recommended that the roles of the Team Leader and Training Advisor be split into two full-time positions to accommodate these changes. We proposed retaining our incumbent Team Leader in the position of Training Advisor, and recruiting a skilled agricultural planner and contract manager to fill the position of Team Leader. However, we failed to make our case with US/AID in this area. The result was that the Technical Assistance Contract continued to function under an organizational structure which was outdated and somewhat unresponsive to the political, administrative and technical needs of the APP.

2.1.3 Technical Assistance Contractor

The final locus of the policy/managerial lessons learned during our involvement in the APP apply to ALNA--the source of technical assistance to the project for 3-1/2 years.

2.1.3.1 The Technical Assistance Contractor Failed to Effectively "Sell" the APP to MOA and AID

Experienced technical assistance contractors recognize that their projects must compete with other projects for the attention of both their clients--the sponsoring client and the receiving client. It is naive to expect that both clients have only one project with which to concern themselves.

Because we preoccupied ourselves with start-up activities, we came late to the realization that the top management of the Ministry had not made the project a top priority. We learned that the project did not have high visibility to Secretary and Permanent Secretary of the Ministry and, consequently, required resources were not available to them as we had anticipated they would be.



Turning to the Mission for assistance was not the answer because of their high workload given the federal mandates for "reduction in the federal workforce." In addition, we inadvertently caused increased friction between the project sponsors.

Given this set of experience, we realized that, during the first six months of the project, we should have devoted a great deal more time to promoting the Agriculture Planning Project within the Ministry. The strategy should have involved seminars for mid and top management to assure their understanding of the project as well as their required participation if success was to be realized. They could have gained through the seminars a more complete understanding of their personal and unit cost and benefits resulting from the project.

In addition to these seminars, management and staff should have been provided with constant feedback regarding project plans and successes. We learned early that presentations we were making to the project coordinator went no further. With this information, we should have provided technical assistance to the coordinator in the importance of dissemination of project information and project activities including planning and accomplishments.

We recommend that for future projects, the Mission consider making project promotion within the agency of the receiving client a written requirement of the contract. This will assure that proper attention is given this critical element of project success.

2.1.3.2 The Shift in the Team Leader Role Should Have Been Recognized Earlier

In Section 2.1.2, we presented our analysis of the shift in the requirements imposed on the Team Leader of the Technical Assistance Contract. In retrospect, we believe that, while our assessment is valid, it also came too late. We did not recognize or attempt to address this issue until the contract was well over two years old. By this time, some problems had already been created by the lack of "fit" between the evolving requirements of the position and the qualifications and background of the incumbent.

At the end of the first year, it was apparent that the Team Leader would have to be involved in controlling the use of Advisors to prevent inappropriate provision of staff assistance, that specific knowledge and



experience in agricultural planning and policy formulation was required of the Team Leader to promote the project and participate in the formulation of the "five-year agriculture plan." We realized that respect for the project was directly related to the amount of respect commanded by the Team Leader and that this respect was predicated on the perception of the Team Leader as a manager of agriculture planning and not a manager of training.

It was amid these problems that we tried, and failed, to persuade AID to modify the contract's staffing pattern to address the altered Team Leader role. Had we recognized this need earlier, we would have been in a position to take preventive action rather than reactive measures, and might have been more successful in presenting our case.

We recommend that, in the future, the Mission recognize the limitations on long-term plans and provide in both budget and program considerations for the possibility of unanticipated changes in the scope of services that can result in the need for staff changes.

2.1.3.3 The Contractor Did Not Aggressively Control the Use of Advisors

While the inappropriate use of Advisor's services was, in large part, due to the staff shortages and inadequate planning capacity of the Ministry, the fact remains that we let it happen. For example, we allowed some Advisors to function in MOA staff roles even when the long-term technology transfer benefits of their services were questionable.

In reviewing these issues, we believe that this type of decision was not in the best interests of the Ministry. Contract resources should have been carefully allocated, deployed only when the MOA had completed the preparation necessary to ensure maximum gain from their application. In a sense, we, too, fell into the trap of putting out "brushfires." We sometimes responded to the crisis needs of the Ministry without adequate reference to the overall mission of the APP.

2.1.3.4 Some Contractor Recommendations Did Not Recognize the Limitations of MOA

During the early stages of our contract, especially before we realized the impact of personnel shortages and high staff turnover within the Ministry, ALNA made some recommendations that we now recognize as inappropriate to the resources of MOA. Many of these recommendations were in the area of data analysis and information systems. Most likely, they



contributed to the slippage of agreed-upon schedules and confusion between the Ministry and the Contractor.

We believe that we have identified and rectified these errors during the ensuing contract years. We recognize, however, that future APP technical assistance efforts must be far more geared to the realities of MUA than to documented assumptions drawn from project and concept papers.

2.1.3.5 The Contractor Was Not Aggressive in Identifying Contract Modifications for MUA and the Mission

One of the most significant lessons we learned as contractor was the importance of timeliness in getting agreement, documentation, schedule and budget changes to comply with changes in the Scope of Work.

The process of changing the Scope of Work for international contracts is necessarily much longer than for domestic contracts. The results can require contract extension and cost overruns. Often the contractor and the Ministry are tempted to implement a change in the Scope of Work prior to the modification of the contract. The reason for this is that often the work can be completed prior to the time it takes to get the contract officially modified. When Advisors are already outside the country, it is not economically feasible to send them home to await the contract modification.

We experienced two changes in the Scope of Work which were desired by the Ministry and the Mission. One involved the use of Advisors to help in the development of a five-year plan. Another involved the change of an Advisor in the area of Systems and Programs Analysis from a short-term to a long-term Advisor. In other cases the anticipated length of service of Advisors was either increased or decreased. In each of these cases the change in the Scope of Work was implemented prior to modification of the contract. This resulted in the contractor being at risk for costs which were only unofficially approved.

We recommend that the Mission review its process for modification of contracts prior to implementation of changes in the Scope of Work. We feel that it is an unwarranted burden on contractors to be placed in the position of not knowing whether or not they will be paid for services rendered. Even though in each case the modification did come through, we believe that our productivity would have been more effective had we been more comfortable in the execution of our responsibility.



2.2 Programmatic Findings

In this section, we present and discuss findings and make recommendations in the programmatic areas where technical assistance is needed in the future. These include:

- o Data and Policy;
- o Survey Methodology;
- o Library Systems;
- o Data and Policy Analysis;
- o Systems and Programs;
- o Training; and
- o Programmatic Management.

2.2.1 Data and Policy

2.2.1.1 Data Collection and Estimation Should be Strengthened

A strengthened data collection and estimation system is necessary to provide timely, reliable data for proposed planning and project monitoring activities. The current data collection and estimation system, especially for crops, is not capable of producing accurate and precise estimates with measurable reliability. The methodology and resulting estimates are not statistically defensible.

The MOA is in the process of developing an objective data collection and estimation system for crop forecasts and estimates. This activity should be continued. Given that the MOA does not have experienced staff in this area, continued intermittent technical assistance should be obtained for the staff in the Data Collection and Statistics Unit.

2.2.1.2 The Manpower Shortage is a Serious Problem in this Area

Staff turnover is a serious and continuous problem for the Ministry. It is virtually impossible to build and train experienced staff under present conditions. At the same time, new staff in data collection and statistics are usually minimally trained and are not fully effective until after substantial training.

The MOA should increase to the maximum possible level salaries, fringe benefits, incentives and working conditions to retain staff in Data Collection and Statistics. Otherwise, advisory support programs are to no avail.



2.2.1.3 Official Data Source is Needed for MOA Efficiency

Data are being collected, and estimates are being made and distributed by many units in the Ministry organization. Because of these independent activities, a number of units wish to control and administer their own data processing capability. We believe, however, that the Data Bank and Evaluation Division should be designated as the official data source for the Ministry. Estimates from the Division surveys should be released by the Ministry and considered Ministry estimates.

This strategy will serve the twin purposes of controlling the quantity and quality of data and estimates, and reducing the requests for data processing capability by many Ministry organizational units.

The Ministry should move toward centralizing the data processing capability in the Data Bank and Evaluation Division or other appropriate organizational entity to assure economy of scale and quality control.

2.2.1.4 A Continuous Planning System is Essential

The Ministry organization does not provide a strong continuing system which establishes and reviews priorities and allocates resources to satisfy the priorities. As consequent projects are not continuously productive, the ebb and flow of project activities lead to poor quality control and high cost. The Ministry and USAID should assure that planning is complete and resources are available before technical assistance is procured and/or provided.

2.2.2 Systems and Programs

As stated earlier, a major consideration for the future will be centralization of Data Processing as a means to bring a halt to the proliferation of uncoordinated micro-computers throughout the Ministry. Once the IBM System 38 computer is installed, the Ministry should develop and implement a comprehensive ADP policy which includes acquisition and use of micro-computers by other MOA units. This should be accompanied by a work plan which prioritizes ADP center use to meet the information processing needs of various units of the MOA.

There will be substantial need for training at all levels for the operation of the System 38, including computer operation programming and systems analysis. At the end of the project, adequate staff were not available and will need to be hired or obtained through consultancies. Given the heavy turnover of staff, there should be an appropriate human



resource program and incentives to attract and retain staff. To promote the effective utilization of ADP, programs for the development of managerial skills will be also needed.

We recommend that the Ministry develop and implement a user-support training program to include:

- o Training on a continuing basis of the computer facility staff at all levels;
- o A computer literacy program for the general MOA staff;
- o Assistance to other MOA personnel who would be using computer terminals to interact with the MOA mainframe computer;
- o Development of a guide for users of the computer facility/ services;
- o Development of a charge back system for the use of the ADP resources by the various MOA units;
- o Development of computer facility operational procedures; and
- o Development of the communication links to link remote facility.

2.2.3 Library Systems

From a relatively simple undertaking of developing a Data Bank Library, this task grew into an in-depth review of the information handling activities of the Ministry and planning an information system for the integrated management and utilization of Ministry's knowledge-based information resources.

Much progress has been made in identifying the requirements and developing a conceptual framework for such a system. However, serious policy, organizational, and operational issues remain to be resolved. It is obvious that the Ministry must act to resolve these issues before any further progress can be made in implementing this system.

The Ministry's Five Year Plan has also incorporated a proposal for a similar information system to support the successful implementation of the Plan. The proposed system provides for the (a) role of MOA as collector and provider of information as well as the source of official agricultural data; (b) use of data/information to MOA's decision-making, policy development, program planning, project management, research and development, training, and similar function; and (c) dissemination and transfer of information to the Jamaican farmer and others associated with Jamaican agriculture. It is



crucial that the Ministry proceed with the immediate implementation of this system to ensure the success of the Five Year Plan.

It is clear that until the Ministry recognizes and accepts data/information as a valuable resource and learns to manage and use it like other resources, such as human, financial, physical, material, etc., its planning and related activities are likely to be less effective, less productive, and, often, duplicative and wasteful. The Ministry needs to recognize and establish a discrete information management function. This should lead to the formulation and implementation of a Ministry wide information policy covering all knowledge-based resources, including data, information, publications, ADP, printing, learning resources, microforms, and machine-readable materials.

The Ministry should vest a senior-level well-qualified official with overall management responsibility and authority for information management at an appropriate organizational level within the Ministry. In addition, we believe that technical assistance will be needed in the following areas:

- o Assistance in identifying the critical policy issues and developing and enunciating viable policy options for review and adoption by MOA;
- o Assistance in developing operational plans, procedures, and workflows to implement the proposed information system;
- o Assistance in identifying the training needs and developing an appropriate training program for the information handling personnel; and
- o Assistance in developing information dissemination/transfer strategies, both within the Ministry as well as outside, including communication of information to Jamaican farmers.

Given an appropriate attitude towards the management of information as a critical and essential resource, the Ministry could eliminate duplicative and uncoordinated efforts now scattered among various MOA units. This could actually result in considerable saving to the Ministry. The Ministry would also be able to document its activities and operations to develop an institutional memory which would allow for retention, storage, and subsequent availability of the data/information on those activities.



This system is the key to manage effectively the growth of information available to and needed by the Ministry.

2.2.4 Data and Policy Analysis

Future support to the Ministry should focus on technical assistance to users in the application of the Five Year Plan as a management tool. The Five Year Plan should now serve as the guide for the centralization process and as the mandate for the centralization of the plan, ADP, training, information management, as well as project, program and management evaluation.

Training in the implementation of the five-year plan should take place at all levels of the Ministry. This training should be delivered in conjunction with performance-based evaluation systems which incorporate planning for evaluation activities as essential management functions. The training should be designed to emphasize the participatory process which should result in investment and commitment on the part of users of the plan.

Training should also take into consideration the fact that management development is an ongoing process. Thus, the training should provide opportunities for "refreshers" in planning, evaluation and resource allocation skills.

2.2.5 Survey Methodology

Staff in the policy and evaluation division who are responsible for survey data collection and dissemination need continued intermittent assistance in survey design techniques and analysis and implementation. Assistance is needed to ensure that the following activities are completed as planned:

- o the crop production survey;
- o training of staff in area photographic analysis and training of field staff for study conduct;
- o assistance in the analysis of the 6,000 questionnaires for food consumption survey, especially in the food processing portion of the study;
- o assistance in annual upgrading and updating of the Farmers Register;
- o monitoring and evaluation of the small farmer's credit project;



- o forecasting of farmgate prime crop;
- o cooperative evaluation of production for domestic food crops;
- o conduct of the migration survey for St. Thomas, Portland and Red River.

The results of these surveys are essential since they form the base for short- and long-term planning for the Ministry. This unit, with assistance, was the most productive of all of the other units receiving assistance. Without on-going assistance, this unit's productivity will become substantially reduced because of inexperienced staff, traditionally high staff turnover, and the growing demand for its products by other Ministry units, other Ministries, local planners, farmers and professional planners and education.

2.2.6 Training

The demands placed on the Training Division increased dramatically during the last year of the contract. The Ministry responded in part by adding to the division another Advisor to assist in the areas of policy formulation and planning.

The implementation of the five-year plan and the results of the skills inventory and master training plan, will increase the demand for service from the training division to an unprecedented level. During 1985 the activities of the top management of the Division must shift from planning to implementation--delivery of training.

Implementation of the five-year plan will require training of top and mid level managers in its use and content. Data from the skills inventory and master training plan will require the development of several courses and the delivery of training to a large cadre of staff.

These new demands will not replace the old ones but rather add to them. Training will be needed for ADP personnel and for implementation of the Library Information System. The Data and Collection Unit will also require training in the conduct of the ambitious list of surveys to be completed in 1984/85.

Thus, the accomplishment of the planned activities of the various organizational units will require a great deal of activity on the part of the training division. The training division will need a full complement of thoroughly competent staff in order to meet these demands.



As the training division currently stands, it will require a range of technical assistance services to provide the needed training services of the Ministry. Support will be required for the development of new staff, design and development of training material, and in the delivery of training. Specifically, content specialists will be required to assist training specialists in material development, management specialists will be needed to assist with the management of the large training system, training specialists will be needed to train new staff in training delivery techniques and to provide additional training for all staff in training evaluation techniques.

2.2.7 Programmatic Management

During the past three years the project staff, especially the Team Leader, was increasingly involved in the management aspects of the APP. This involvement ranged from inter-unit coordination to promotion of the project within and as necessary outside of the Ministry.

This level of managerial involvement was necessitated because of the demanding workload of the project coordinator, and, during the first years of the project, a non-directive attitude toward the project by MOA and AID top management.

During the next few years the workload will increase for the project coordinator given shrinking departmental budgets and loss in supporting human resources. Consequently, operating units of the APP are likely to be less coordinated and the project will become more disarranged. In addition, there are several mandates for centralization--ADP, five-year plan, information system, etc--increasing the requirements for coordination and coordinated planning.

Because planning is still being institutionalized the Ministry will need continued assistance in this process. As we stated in our third year annual report "the institutionalization of planning as a pertinent day-to-day management tool will require a process of monitoring and evaluation." This activity will require top level technical assistance support services which are not available in the Ministry because persons able to deliver this type of support are fully engaged in equally important initiatives.

We therefore recommend outside support for this function. The person engaged to provide this service should offer an array of support activities similar to those provided by our Team Leader.

 A. L. NELLUM AND ASSOCIATES

3.0 SUMMARY OF RECOMMENDATIONS

The reader will note that a number of suggestions and recommendations for continuation and improvement of the APP are contained in the preceding sections of this report. These recommendations usually follow a description of the problem or implementation barrier to which they are related. This final section of the report summarizes ALNA's recommendations for future APP activities, according to policy/managerial issues and needs for future technical assistance.

3.1 Policy/Managerial Recommendations

Our recommendations in the areas of APP management and policy are largely related to the concept that on-going implementation and application of the five year plan is a critical step in the continued development of Jamaica's agricultural system. Use of this document will provide the MOA with the data, evaluative capacity and structure needed to achieve a systematic and reality-based agricultural program throughout the Island. This outcome was one of the major initial goals of the APP; it is no less critical now than it was when the Project was designed.

Our major recommendations for changes in APP policy and management may be summarized as follows:

- o Implementation of the Five Year Plan should become a top priority for the MOA, demonstrated through the formal designation of responsibility for APP oversight and support to a senior person in the Office of the Permanent Secretary.
- o Staff turnover, and the problems resulting from it, should be addressed through
 - exploration of use of consultants in key programmatic and technical positions;
 - development and implementation of a clear and consistent system of employee performance review;
 - amelioration of communication problems and resource shortages which lower staff morale.
- o The Data Bank and Evaluation Division should be designated as the central and official source of all MOA data, functioning in a distributive capacity to ensure that the data needs of all units are met.



- o A comprehensive ADP policy for the Ministry should be developed to include acquisition and use of data, micro-computers and terminals by all MOA units.
- o MOA preparation for all future technical assistance to be provided should include:
 - establishment of goals and objectives;
 - complete identification and allocation of human, fiscal and material resources needed;
 - schedules;
 - evaluation criteria;
 - area of accountability for all MOA and provider staff involved.
- o The Ministry and the Mission should develop and document a mutually accountable relationship which specifies the roles, expectations and evaluative measures of both AID and the GOJ in continuation of the APP.
- o The Deputy Administrator of the Mission should resume an on-going role in the APP in order to ensure appropriate and necessary levels of support to the project from AID.

3.2 Recommendations for Future Technical Assistance

ALNA believes that the continued provision of assistance to the APP will be essential to the eventual success of the Project. Schedule delays, high staff turnover and lack of critical resources have, thus far, combined to prevent the MOA from attaining the degree of internal capability needed for them to implement the Five Year Plan unassisted.

A summary of ALNA's major recommendations in the area of future APP technical assistance activities includes:

- o All technical and programmatic recommendations generated by future technical assistance activities should be carefully analyzed by the contractor, MOA and the Mission to ensure relevance to the resources and capabilities of the Ministry.
- o Promotion of the APP within the MOA should be a part of the required, and budgeted, scope of work for any future APP technical assistance activities.



- o Any further APP technical assistance project should be administered by a skilled agricultural planner with extensive experience in management and provision of technical assistance.
- o MOA staff will need extensive training in the use of IBM System/38 computer (including programming and system analysis), and in computer literacy and technical operation for MOA staff who are not employed in the Data Bank and Evaluation Division.
- o MOA will require assistance in the identification of policy issues and delineation of policy operations, plans and procedures in the entire scope of its information management activities.
- o Assistance will be needed in the development of strategies for information transfer and dissemination both within and outside the Ministry.
- o Future assistance should focus heavily on development and renewal management, planning and evaluation skills at all levels of MOA management, including Ministry executive staff
- o The Ministry will need continued training and assistance in survey methodology, photographic analysis, data collection and data analysis to ensure an adequate agricultural survey capacity within the agency.
- o A range of assistance in training and development of MOA staff will be required in both technical and managerial areas. This will include needs for content experts and training specialists to assist MOA in identifying needed courses and in the design and delivery of training to MOA personnel.

