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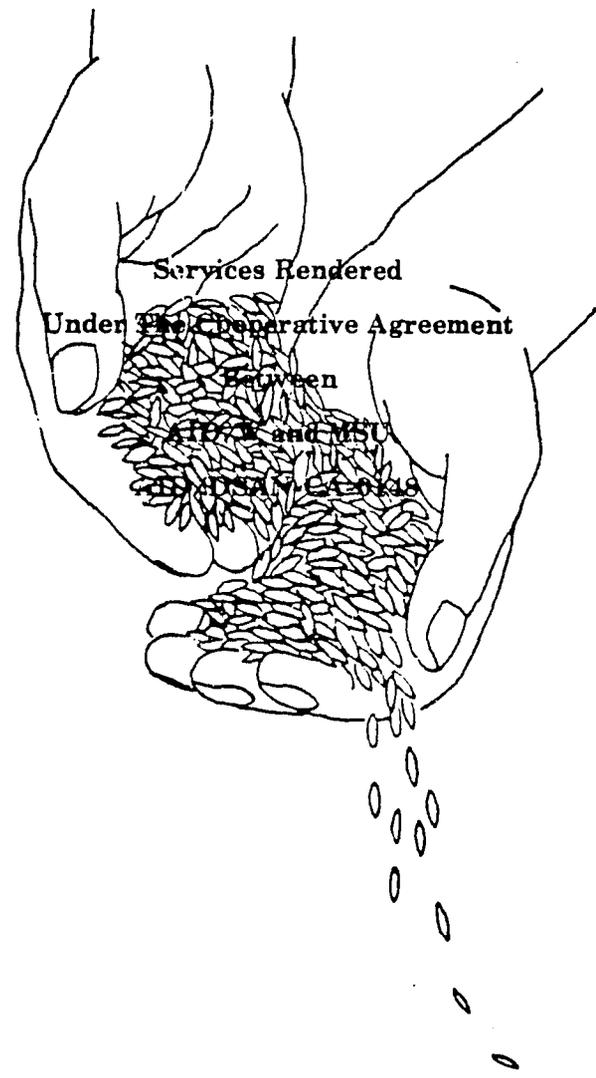
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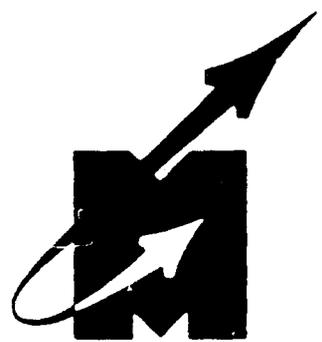
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EVALUATION OF PROGRESS OF
GUYANA SEED FARM DEVELOPMENT PROJECT



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13. SUMMARY

The project has advanced in the directions and manner envisioned in the PP but at a slower pace than projected in the implementation plan. The major short falls have been in technical assistance (6 mos. delay), training (1½ yr. delay), facility construction and equipment requisition (about 1 yr.). These short falls have, of course, impeded efforts to increase the kinds and quantities of seed produced and distributed.

Progress in other areas such as re-organization of the seed program, establishment of a National Seed Committee and strengthening of the Central Seed Center at Mon Repos has been satisfactory, i.e., essentially as schedule.

Although the short falls have delayed the project by about 1 yr., the purpose and goal are attainable (with a 1 yr. extension). On basis of current efforts, it now appears that development of the satellite seed centers will begin in Sept.-Oct., 1980 with operational status expected in summer 1981. Specific factors and/or problems which have contributed to the delay in development of outputs (and use of inputs) are discussed under 16 and 17, and in the Attachments. Recommendations for revision of project, e.g., termination date, training schedule are given in the evaluation under 16 and 17.

14. Evaluation Methodology

The Evaluation Plan in the PP provides for three evaluations: a 1st evaluation to be conducted in Nov. 1979, (approx. 1 yr. after initiation

of project); a 2nd evaluation one year later; and a final comprehensive evaluation at the end of the project. The purpose of the first evaluation is to assess progress in achieving major "outputs", i.e., reorganization of seed program, development of facilities, functioning of the distribution system, participant training. Special attention is to be given to identification of shortfalls in the implementation schedule, and validity of the project design. As a result of shortfalls in the delivery of inputs and, as a consequence, in outputs as well, the first evaluation was postponed for 6 months. The purpose of the evaluation, however, is unchanged.

Straight forward methodology was used to achieve the purpose of this first evaluation. The progress of the project as well as problems encountered were reviewed in detail with personnel of the Seed Program Unit, CES, Mon Repos, John Conje, Dwight Steen, and John Craig of USAID, and Eric Wright, Seed Advisor (TA). This review encompassed interviews, the USAID project files, the Seed Program files, on-site inspections at Black Bush and Mon Repos, and analyses of equipment purchases and specifications, facility designs and specifications. An interview visit was also held with Louie Amsterdam, MOA coordinator for the still pending "Integrated Rural Marketing Centers" project to be funded by IDB. This project if and when implemented will impact in the seed distribution area. As a final stage in the evaluation process, a meeting was held in the offices of the CAO, MOA under the joint chairmanship of Irving Telfer DCAO, and John Craig, USAID. Most members of the National Seed Committee were present. The tentative findings from the evaluation were presented and discussed.

15. External Factors

The major change in the external setting of the project is development and implementation of AID Project 504-0075, "Small Farm Development-Black Bush Region". This AID loan/grant project has the purpose of increasing the production of rice and other food crops by 6,000 small farm families in the Black Bush Region of Guyana. It is one component of a multi-doner global project focussed on improvements in the Black Bush Region. The over-all project will improve and increase the water supply, rehabilitate and improve irrigation and drainage systems, assist in on-farm improvements, and improve agricultural support services and other facilities so as to increase rice production and other food crop production in the project area. The outreach program will include: improvement of seed supply and usage; adaptive research to identify appropriate combinations of production inputs; improvements in cultural and management practices; and improvements in processing and marketing linkages. Project 504-0075 and the Seed Farm Development project are complementary. The seed project will provide one important input, viz., improved seed, for the "other food crop" element of the Black Bush Region Small Farm Development Project. (Rice seed production is handled separately and will be improved under Project 504-0075). On the other hand, the Black Bush Region Small Farm Holder project will increase the demand for the "other food crop" seed handled by the Seed Farm Project and the efficiency and effectiveness of seed usage.

Apart from the very positive change in external setting cited above, there have been no other substantive external changes - positive or negative - in the project setting. The delay in finalization and

implementation of the "Integrated Rural Marketing Services" project is, of course, disappointing. This project, however, is still on stream and progressing and will - when implemented - have a beneficial impact on the distribution side of the Seed Farm Project.

Emphasis on food crop production by GOG is at least as strong as it was when the Seed Farm Development PP was finalized.

16. Inputs

The project inputs on the AID side are: 30 m/m of technical assistance; commodities and equipment; facilities construction; and training. On the GOG side the inputs are personnel and labor, facilities and equipment, and expendable supplies.

Shortfalls in the project outputs (see 17.) are almost wholly the result of delays in the schedule on inputs. The technical assistance input was delayed for 6 months which in turn was a factor in delaying the completion of designs for and construction of the four satellite seed centers. The delay in construction of these has delayed procurement of equipment save for the established Mon Repos center. Other factors which have delayed the construction of the satellite seed facilities are: lack of expertise for the design of the facilities and the failure to request timely assistance; misunderstandings about the detail required in the construction plans; insufficient forcefulness on the part of GOG and USAID in advancing the planning and design process. The result of the interactions of these factors is a minimum 1 yr. delay in commissioning of the facilities.

In the training component one 3-month training program was completed on schedule, while the second 3-month program has been delayed

and might be cancelled because of difficulties in finding a suitable candidate. The 24-month programs (2) have not been implemented. The first candidate was accepted by Miss. State Univ. but was subsequently disqualified by GOG because he held a U.S. resident visa. The second candidate should be admitted by MSU in August, 1980. In view of the shortfall in training, the 3-week in-country training program scheduled for Dec. 1980 or Jan. 1981 has been advanced to September 1980.

On the GOG side, the staff of the Seed Technology Unit at Mon Repos has been augmented by two AOs (1-early 1978, 1-early 1980), one technical assistant (1978), three new assistants (Feb., 1980), and two workers re-classified as storekeeper and technician. This increase in staffing appears to be proceeding at a satisfactory rate in view of the delay in completion of the satellite seed centers. The other GOG inputs appear to have been acceptable except for shortages of fertilizer and herbicides.

In view of the shortfalls in the inputs implementation schedule and problems contributing to the shortfalls, the following changes in inputs should be made.

- (1) The termination date of the project should be extended from Sept. 30, 1981 to Sept. 30, 1982.
- (2) One (the remaining) 24-month training program should be canceled with unutilized funds used to finance a third 3-month training program (2nd and 3rd three month trainees to be scheduled for June-August, 1981), in-country training programs, and for other contingencies.
- (3) A new implementation plan for the project taking into account the delays in the schedule of inputs should be adopted (Attachment 5).

4. Equipment list should be revised as per Attachment 4.

17. Outputs

As mentioned in 16. The project outputs have fallen behind schedule as a consequence of delays in the utilization and application of inputs. Mainly the shortfalls in outputs have been in the areas of facilities and trained personnel, which, especially the former, have delayed the output of seed produced and distributed in Guyana (Attachment 2).

The designs of the main satellite seed centers are almost complete. The designs, however, did not include drying sheds which should be an integral component of the satellite facilities. Mississippi State University will prepare general designs of the drying sheds so that they can be incorporated in the overall plan and contract for each satellite facility (Attachment 3).

Other outputs are progressing satisfactorily. A National Seed Committee for establishing policies related to seed supply and usage and for providing guidance to the seed program has been established and is functioning. The Seed Program (Unit) is slowly being re-organized. It is being upgraded to a unit of the Crop Science Division, Agriculture Department on the same level as Agronomy and Plant Protection. Presently, it (the Seed Unit) is a subunit of the Agronomy Department (Attachment 1.B). The Seed Unit has also been given the responsibility for production of foundation seed, and for arranging and supervising the production of commercial seed, i.e., seed to be distributed to farmers. Previous assignment of these functions to other units had impeded the

development of seed production and supply. The Mon Repos Central Seed Center has received its complement of equipment to augment that which it already has, and some re-modeling of the facility is underway. A seed drying shed and unit still need to be constructed at Mon Repos. A 10 acre irrigation system on order will greatly improve the seed production capability and capacity at the CES, and permit production of seed during the dry season which is most favorable in terms of seed quality.

The changes required in outputs are essentially changes in timing to take delays in implementation into account. The adoption of the proposed revised implementation schedule and project termination date recommended under inputs will also take care of outputs.

Some technical changes of a minor nature, e.g., change in Black Bush seed center from new building to remodeling existing building and alterations in equipment, are needed as discussed and detailed in Attachment 4.

The most serious problem in the delivery of project outputs is the lack of power to operate two of the proposed satellite seed centers. The change in location of the Black Bush area satellite center from around Yakusari to an abandoned - but still serviceable - group of buildings belonging to the GRB will make the center dependent on two old generators for power. Since a power line is within a mile of the buildings, the possibility of running of a power line to the site should be explored. It should be mentioned that the GRB will be expanding its rice seed operations at the same site which will permit some sharing of quality control services. It will also better assure the power supply since the GRB appears to have substantial leverage in the country.

The Ebini satellite seed center was constructed prior to the project. Some additions will need to be made under the project. The problems of power supply, however, remain. The National Service Center at Kimbia has adequate power and arrangements should be made to run a power line from the Kimbia generating station to Ebini.

Recommendation:

(1) Design and plans for a drying shed at each satellite seed center and at Mon Repos should be incorporated in the plans and contract for construction of the satellite seed centers.

One change is needed in the "Objectively Verifiable Indicators" in the Log Frame. Under Project Purpose, it is proposed that a 300% increase in seed production over 1977 be taken as a condition to indicate purpose has been achieved. This indication is not now attainable and it was not attainable when the Log Frame was structured. The feasibility study on which the PP was based stated that improvements in the seed program should be made to increase its capability and capacity for production of up to 300% of the established 1978 seed requirements for "food crop". The statement did not mean that full capacity would be reached in the 2.5 years of the project! Progress is seldom that rapid. Rather, the statement meant that an investment to increase the capability of the seed program by 300% was reasonable and feasible. Since an investment in seed facilities is rather longterm, full capacity will probably not be reached for 5-10 yrs. An alternative condition for verification that is more reasonable would be: seed supply is no longer a major constraint to food production.

18. Purpose

The purpose of the project is: To improve and expand the capacity and capabilities of the seed program to assure an adequate and timely supply of food crop seed. The main strategy employed to achieve the purpose of the project is:

- (a) Reorganization of the existing seed unit to provide for better management and coordination of the various operations in seed production and supply.
- (b) Strengthening of the capabilities and capacity of the seed unit by providing for needed equipment, facilities, trained personnel and technical assistance.
- (c) The establishment of satellite seed centers in major areas of seed use so as to improve the efficiency and effectiveness of distribution.

Substantial progress is being made toward achievement of the project purpose. The seed program has been re-organized to give it greater responsibility for seed production operations, and reorganization is continuing to facilitate decision making. A National Seed Committee has been established to develop broad policies relating to seed production and distribution, to give guidance to the seed program, and to insure cooperation among the several institutions engaged in seed production. The staff at Mon Repos has been strengthened and equipment purchased has been received. The main shortfalls have been the delays in development of the satellite seed facilities. These now appear to be on track, and construction should begin in Sept.-Oct.

GOG (the Seed Unit and the National Seed Committee), are aware of and addressing problem areas such as seed demand forecasting, production contracts, inadequate or unavailable power, and distribution. They are also looking into other related issues such as subsidies on seed and blackeye peas (food).

19. Goal/Subgoal

The goal of the project is: To increase the level of self-sufficiency in food crop production with corresponding increase in farmers' and gardeners' income. The goal is both valid and attainable - but not in the life of this project, nor wholly as a consequence of this project. This project was designed to provide one input essential for attainment of the goal of food crop self-sufficiency. Put another way, in time the program strengthened by the project should minimize if not eliminate the constraint of insufficient seed supply on food crop production. Attainment of the broad sector goal of food crop self-sufficiency will require other steps some of which are being taken, i.e., the Black Bush Small Farmer project, the IDB "Integrated Rural Marketing Centers" project; GOG action to remove subsidies on food crops; and improve procurement of fertilizer and pesticides.

20. Beneficiaries

The beneficiaries of the project are small farmer/gardener producers, and indirectly, the food consuming public. The project has not operated long enough to permit any assessment of its impact on beneficiaries at this evaluation.

- Attachment 1. A. Structure of the National Seed Committee.
B. Re-organization of the Seed Unit.
- Attachment 2. Seed production and distribution in 1978 and 1979.
- Attachment 3. Analysis of plans for satellite seed facilities, with recommendations.
- Attachment 4. Analysis of equipment needs, with recommendations.
- Attachment 5. Recommended revised implementation plan.

A. NATIONAL SEED COMMITTEE

The "National Seed Committee" is constituted as an Executive Sub-committee of the National Agricultural Coordinating Committee.

Composition is as follows:

Chairman: Dy Chief Agr. Officer

Secretary: Chief, Seed Unit

Representative from Agr. Ext , MOA

Representative from GRB

Representative from GUYSUCO

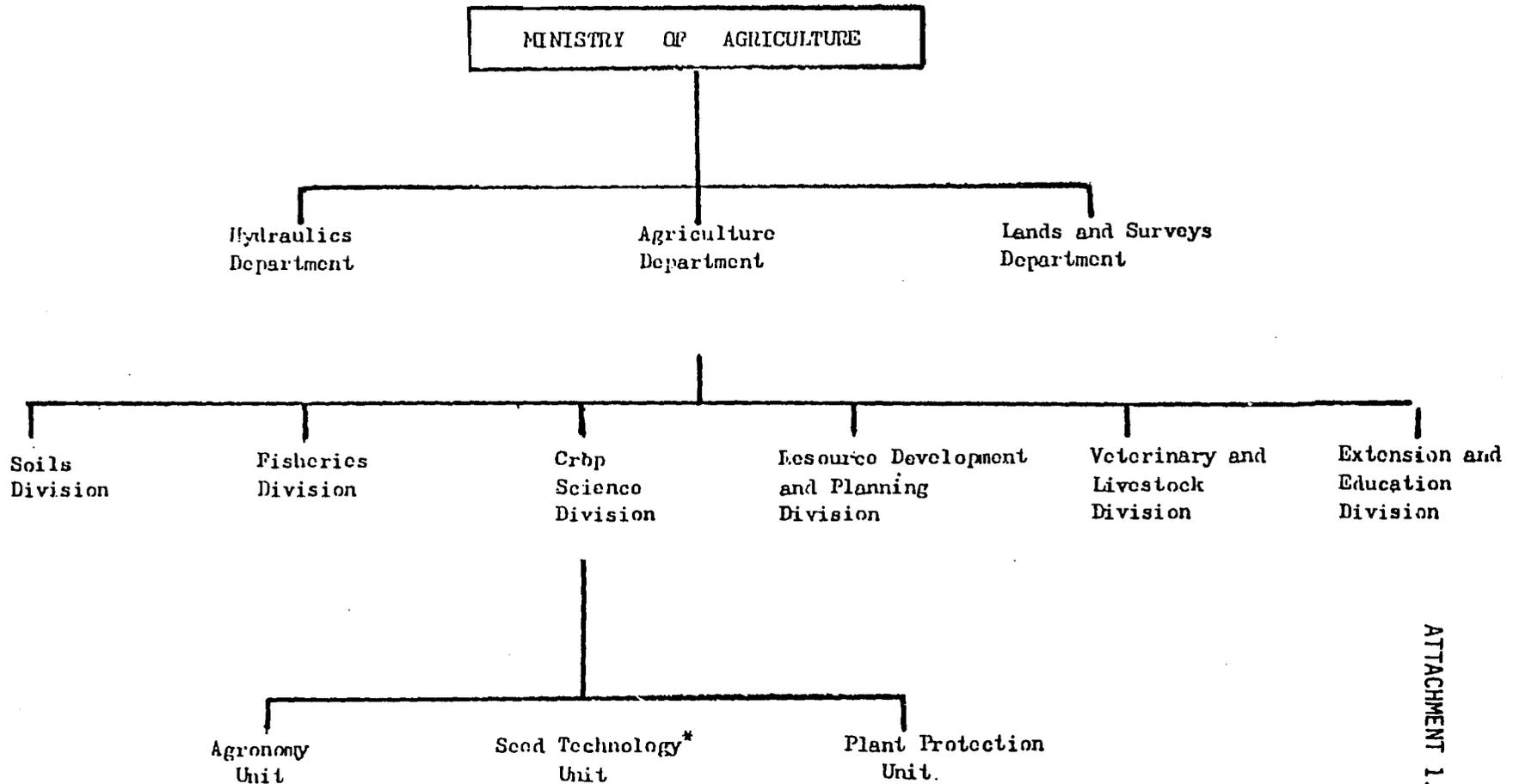
Representative from GNS

Representative from Guyana Mkt. Corp.

Representative from Crop Science, MOA

Advisor: Technical Expert

ORGANIZATIONAL CHART I



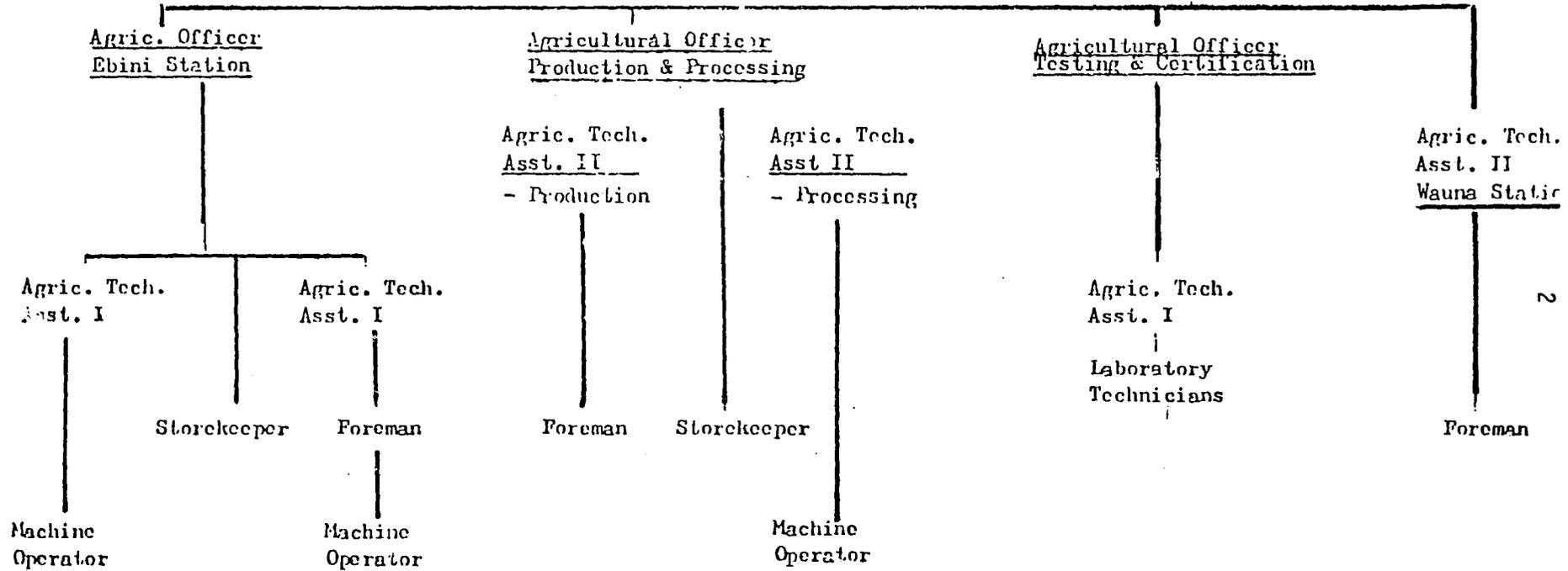
ATTACHMENT 1.B.

* Now a sub-section of Agronomy with 1 Agronomist; 1 Agri. Office, 3 Agricultural Technical Assts. 1 Laboratory Technician to be upgraded to a sub-division staffed as shown on Organizational Chart II.

PRODUCTION MANAGER : SEED TECHNOLOGY

AGRONOMIST - SEED TECHNOLOGY

MON REPOS STATION



Charity

The basic design for the processing-storage building at Charity has been laid out by GUYANEX. The design of the 40 x 60 ft. building is sound but USAID/G has requested more details before construction begins.

On drawings for this building detail "A" showing insulation of the walls and ceiling must be modified to indicate the polyethylene vapor barrier on the outside of the insulation. Detail "B" for insulation of a masonry-wall does not show a vapor barrier. There must be one outside the insulation as in the case of detail "A". There should also be a vapor barrier under the floor of the entire building but there must be a vapor barrier under the part where the conditioned seed storeroom is located.

In addition to the building above, the drying floor and the bag and dryer should all be considered together and built at the same time. GUYANEC currently does not have plans for these two parts of the facility. MSU will provide the designs. (See comments on dryers later in this section).

Ebini

The proposed building for Ebini is already available. An addition for air conditioned storage has been partially designed by GUYANEC. This design appears to be good but the room can probably be constructed inside the existing structure with some savings in cost. A final decision on this will depend on office needs and cost estimates not available at this time. The seed section must make the final decision on this when more information is available.

The problem of electric power also has not been resolved. We hope it can be resolved quickly so as not to delay orders for equipment.

As at Charity, the drying floor and bag dryer must be constructed at the same time.

Wauna

The building designed by GUYANEC appears to meet the needs of this location. Construction can probably begin as soon as final architectural details and costs are worked out.

There is interest in the seed section for a peanut sheller for Wauna. We do not recommend one at this time because of the many problems associated with mechanical shelling, the costs involved and the small amount of peanut seed production. We do agree to investigate more fully some small hand operated units, and other possibilities discussed, and forward the information obtained. If a good hand operated unit becomes available we feel it would be extremely useful.

Drying Facilities

Drying floors were indicated for Charity, Ebini, and Black Bush Polder. The one for Black Bush was deleted because of the ample space available in the GRB facility.

Bag and/or bag/bin dryers were indicated for Charity, Mon Repos and Ebini. Apparently the architects do not completely understand what was intended from the original description. To clarify this situation, drawings of the facilities will be supplied by MSU/STL so that the architects and engineers will be better able to make final construction drawings and/or decisions to adapt local materials and methods to meet the needs for seed dryers. The drying floor, of course, needs no description. It is just a poured concrete slab.

