GUYANA AGRI-PROGRAMME

TECHNICAL PROPOSAL
TECHNICAL COOPERATION

FOOD CROP PRODUCTION MARKETING PROJECT

IICA GUYANA OFFICE
INTER – AMERICAN INSTITUTE OF AGRICULTURAL SCIENCE

SEPTEMBER 1979

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I. TECHNICAL PROPOSAL

1. Frame of Reference

Agriculture constitutes the most important sector in the economy of Guyana, accounting for: approximately 20% of the GDP (over the last two decades); between 40 and 60% of foreign exchange earnings, and employment of between 30 and 40% of the work force. During the period 1960 - 1977 the real growth rate in the agricultural sector was approximately 2%, barely keeping pace with the rate of population growth. As a result, Guyana developed a high level of dependence on imported food and balance of payment pressures.

1.1 Identification of basic problems which restrict development of the agricultural sector.

1.1.1 Problems related to production

The principal problems responsible for causing the low rate of growth in production of basic food crops are the following:

1. Small size of farms: Food crop production in Guyana has been traditionally in the hands of small farmers who, inspite of the availability of large land areas, tend to cultivate relatively small plots (5 - 15 acres).

2. Lack of appropriate technologies: Farming is done following a very traditional approach which includes slash and burn, multiple cropping and use of few farm inputs. Government institutions offer little in the way of developing proper technologies, much less an information system for transferring new technologies and other information to small farmers.

3. Limited access to credit: Available institutional credit serves less than 5% of the approximately 35,000 farmers who grow basic food crops. This means that the vast majority of

the farmers must depend on limited personal savings or credit from private sources at exceedingly high interest rates, or go without basic farm inputs.

4. Inadequate supply of farm inputs: The traditional suppliers of farm inputs restrict their commercial outlets to urban centers. Farm inputs distributed by the Ministry of Agriculture are insufficient to meet demand and are often unavailable when needed. The end result is a minimal use of modern farm inputs by the small farmer and correspondingly low yields.

5. Insufficient extension personnel: The Ministry of Agriculture has approximately 43 extensionists to serve approximately 35,000 farmers. This number is severly inadequate considering that most extension work is carried out with individual farmers.

1.1.2 Problems related to marketing

1. Poor accessibility: Due to the difficulty of the natural terrain (many large rivers and few bridges) the transport network is very limited. Many producers therefore do not have easy access to transportation, which makes them overdependent upon traditional intermediaries and thus weakens their bargaining position.

2. Lack of infrastructure: Many small producers when they take their produce to market, are forced to sell at lower than fair prices for want of a place to store their produce overnight. Those, who store this produce for short periods, or who sell to intermediaries or GMC who in-turn store for short periods, cause high levels of post-harvest loss, brought about by inadequate infrastructure.

3. Inadequate packaging and transport: Produce shipped by river boat or truck often suffers a high degree of loss due to a combination of factors including: poor packaging, improper

handling and stacking, delays, excessive heat, etc.

4. Poor market and price information: Government institutions do not offer any price or market information service. Consequently, producers must depend upon the traditional intermediaries for such information, which places them in a relatively weak bargaining position.

5. Lack of extension and educational activities in marketing: Extension agents traditionally dedicate most of their time to promoting and supervising credit and to teaching improved production techniques. Up to the present time no attempt has been made to educate the farmer in basic marketing techniques such as: harvesting, packaging, storage and transport, in an attempt to increase product life thus reducing post-harvest losses.

1.2 Agricultural sector objectives and strategy for implementation

1.2.1 Agricultural sector objectives

The above problems influenced the Government into defining general objectives for the 1978 - 1981 Agricultural Development Plan that may be broadly placed under the headings of:

1. Import Substitution: the achievement of maximum self-sufficiency in commodities for feeding and clothing the nation;

2. Export Promotion: an appreciable increase in volume, variety and earning power of export commodities; and

3. Rural Development: a substantial improvement in the well being of the rural communities by the more equitable distribution of increased sector incomes.

The same 1978 - 1981 Development Plan also specifies the following specific objectives:

1. "Increase production of commodities for local consumption, special emphasis being placed on legumes, corn, fluid milk, cotton, vegetable oil, cassava and vegetables".

2. "Increase production of the traditional export crops, rice and sugar. For rice, increases are to be obtained both by cultivating more acreage and by raising yields per acre. For sugar, increases will be obtained through increased efficiency in field and factory".

3. "Increase in production for export of non-traditional commodities such as beef, pork and pork products, poultry meat and eggs, fish and fish products, pineapples, plantains, yams and vegetable products such as cassareep, tomato paste and dried fruit".

4. "The rationalization and consolidation of the fishing and shrimping industry under the control and direction of a national authority, with specialised subsidiary companies".

5. "The further development of agro-industry, particularly that based on processing of cassava, oil palm, pineapple, citurs, cashew and vegetables".

6. "Higher farm net incomes throughout the nation, ensuring that no farm family receives less than G$6,000 annually in return for its labour and management".

7. "The creation of 20,000 new job opportunities in the sector, i.e. in primary agriculture, fishing, agro-industry and auxiliary services".

8. "The continuation of the process of social education of the community as a whole, and of farmers in particular, as to the central importance of agriculture and the dignity of the occupation. Specifically, no effort will be spared to increase the self-respect, personal motivations and self-confident pride of the farm family".

1.2.2 Agricultural sector strategies

The strategies to put into operation the 1978-81 Agricultural Development Plan centre around two basic areas:

1. Maximizing the efficient use of resources and
2. Provision of appropriate and adequate services.

For each of the two areas, a number of basic measures have been designed.

In the area of maximizing the efficient use of resources, the measures are:

1. Training at all levels will be accelerated - farmers, extension officers, technicans, professionals and managers, especially agri-business.
2. Social organization for production will be emphasised by mobilising the farming community through vibrant self-reliant production groups, Cooperative Societies and regional producer and marketing associations.
3. Provision of suitably designed/adapted mechanical aids for small scale farming activities to reduce the back-breaking labour traditionally associated with that type of farming.
4. Improvement of water control facilities on the coastland. Major drainage and irrigation schemes will be well advanced - (Tapakuma and Mahaicony/Abary) while others (Black Bush Frontlands) will have begun. These projects will greatly increase production in the command areas, both by increasing the cultivable acreage and by improving productivity generally. The formation of a new regime for water management on a nationwide scale will help to ensure that maximum efficiency is realised in the areas served by costly D and I infrastructure and maintenance works.

5. Provision of access and feeder roads and adequate river transport where necessary to facilitate rural settlement and production in the more fertile soils of remote river and mountain areas.

6. The development of productive systems applicable by small and medium scale farm operators which would guarantee adequate returns to the farm family.

7. Improvements in land tenure systems by consolidation, by speedy land registration and issue of title, effective distribution, and settlement.

In the area of provision of appropriate and adequate services, the measures are:

1. Improving the management and technical capability of all involved in production and marketing, and research efforts will be directed as far as possible into areas of direct and immediate application to production.

2. The Guyana Marketing Corporation will be the recipient of substantial injections of capital, early in the plan period in order to more properly equip it for its central role of service to both farmer and consumer and as an agent for export of agricultural products. It will be necessary to re-define the GMC ordinance so that it may assume sole responsibility for the purchase, grading, packaging and storage of farm produce for the wholesale markets.

3. The Ministry of Agriculture will concentrate efforts on distributing its technical and advisory services as widely as possible in the field, and in the provision of essential inputs such as seeds and chemicals in the production area at reasonable prices. This will be accomplished by an increase in the number of Input Distribution Centres.

These strategies are to be implemented through a series of 11 agricultural development projects or programmes which were announced by the Minister of Agriculture in early 1979 as part of the Development Plan. The Food Crop Production/Marketing Programme was one of these.

1.3 Food Crop Production/Marketing Programme

The Food Crop Production/Marketing Programme is part of the Government's "Increase Production Drive" oriented towards the priority goal of making Guyana self-sufficient in basic food crops by removing or reducing the bottlenecks mentioned earlier (see 1.1).

1.3.1 The Executing Agencies

The project has three executing agencies which are:

(1) The Guyana Marketing Corporation

(2) The Guyana Agricultural Industrial Co-operative Development Bank

(3) The Ministry of Agriculture through the Extension and Education Division.

1.3.2 Objectives of the Project

The objectives of the project are to:

1. Assure a sustained supply of reasonably priced quality food crops (vegetables, fruits, ground provisions and others) to the Guyanese population.

2. Encourage increased domestic production of food crops by making the cultivation profitable to farmers through the application of appropriate technology, in combination with provision of adequate credit, extension services and marketing facilities and services.

3. Strengthen institutional and organisational infrastructure, so as to facilitate efficient performance of extension, credit and marketing services related to food crop production.

1.3.3 Description of the Project

The project has two sub-elements which are summarised as follows:

1.3.3.1 Sub-project A: Supervised Credit

The purpose of this sub-project is to grant sub-loans to small food crop farmers (less than 25 acres) within the Programme area to help finance investments and operating expenses required for farm development. It is estimated that at least 800 farmers (with per capita income below US$400) would benefit over the three year commitment of resources period from supervised credit to finance the procurement of agricultural tools, fertilizer, improved seeds and farm infrastructure improvements.

1.3.3.2 Sub-project B: Infrastructure and Agricultural Services

This sub-project includes the construction and equipping of approximately six extension centers and six marketing centers where the necessary services for the Programme's activities will be made available in an integrated and coordinated manner by the participating executing agencies. Additionally, the sub-project includes the construction of a crate factory and the acquisition of transportation equipment which would be complementary to the integrated credit, extension and marketing services. It is estimated that there are approximately 9,000 small food crop producers in the programme's geographic location with incomes of approximately US$363 per year that could benefit from this sub-project.

1.3.4 Characteristics of the Project

So as to facilitate the implementation of the integrated package of goods and services offered through this project the following characteristics are considered to be the most important.

1.3.4.1 Selected crops: Only selected food crops (Plantains, sweet cassava, ground provision, pumpkins, blackeye pea, bora and egg plant) are to be included in the programme.

1.3.4.2 Selected regions: The project will be implemented, in the first stage, in only three geographical regions, selected for their relative importance in food crop production. At later stages additional areas or regions will be included.

1.3.4.3 Institutional integration: A special effort will be made to integrate the services of the three executing agencies.

1.3.4.4 Farmer organisation: A special effort will be made to promote and strengthen farmer organisations so that they may play an active role in the organisation and management of the Rural Integrated Service Centers.

1.3.4.5 Transfer of information: A maximum effort will be made to collect and disseminate technical and market information through the Rural Integrated Service Centers for the benefit of farmers, and collect diagnostic information concerning production and marketing problems for the benefit of Government institution decision makers.

1.3.4.6 Evaluation and Planning: A constant effort will be made to evaluate and improve the operations of the Rural Integrated Service Centers as well as the Extension, Credit and Marketing Services originating from the executing agencies.

1.3.4.7 Inter-Agency Coordinating Committee: So as to achieve the required coordination between the three co-executors an Inter-Agency Coordinating Committee was established on March 23, 1979, consisting of: (a) Minister of Agriculture (Chairman); (b) Chief Agricultural Officer (Co-Chairman); (c) Managing Director of GAIBANK; (d) General Manager of G.M.C.; and (e) Principal Agricultural Officer for Extension and Education. Prior to the first disbursement of the Bank's loan, the committee will appoint an Executive Secretary and appropriate support staff to handle the day-to-day co-ordinating activities.

1.4 Parallel Technical Cooperation

So as to achieve the objectives of the Food Crop Production/ Marketing Programme the services of a consulting firm will be hired to work directly, but in a coordinated manner, with each of the three executing institutions. A brief description of the technical assistance requirements at each institution follows (see annex 1 : Terms of Reference)

1.4.1 Guyana Marketing Corporation

The firm will supply consultant services in the following areas for a total of approximately 40 man/months: (1) administration, organisation and methods (approximately 24 months); (2) marketing information retrieval and information mechanisms (approximately 4 months); (3) financial and accounting management (approximately 12 months). As indicated below, it is suggested that the consultant supplied for the areas of administration and organisation under (1) above, should be the coordinator of all activities to be carried out by the firm.

1.4.2 Guyana Agricultural Cooperative & Industrial Development Bank

Consultant services would be supplied in the following specific areas for a total of approximately 18 man/months:
(1) Organisation and Management (approximately 6 months); and
(2) Portfolio analysis and control (approximately 12 months).
The GAIBANK is to receive two additional specialists in June/July 1979. The first one is being supplied by the European Economic Community (EEC) for one year renewable for a second year and related to loan evaluation and promotion. The second one will be furnished by the AID to work as a computer programmer for approximately 3 months in specific aspects to their lending activities. Activities of all consultants should be well coordinated and integrated so as to maximise efficiency of services.

1.4.3 Ministry of Agriculture - Extension and Education Division

The firm contracted will supply consultant services for approximately twelve months in: (1) the development of planning activities through the use of appropriate methodologies best suited to conditions found in Guyana; (2) development of improved supervision and control mechanism, and (3) preparation and implementation of training courses to be used for their own personnel and rural producers.

1.5 Analysis of Project and its objectives

1.5.1 Feasibility of the Project

The Food Crop Production/Marketing Programme appears to be well conceived and developed. It is an important part of the Agricultural Development Plan and will play a crucial role in reaching the sectorial objective of increasing the supply of basic food crops. It offers a realistic solution to a series of production and marketing problems at the level of the small farmer; and by

stressing the importance of the active participation of organised farmers, heightens considerably the possibilities for effective and long-range impact.

The project follows a very practical approach by limiting the area of influence to selected crops and specific geographical regions, which will permit following stages to benefit from the experiences.

Perhaps the most favourable aspect of the project is its orientation towards an inter-institutional and inter-disciplinary approach which will make the complete package of production and marketing services available to the small farmers. Likewise the creation of an inter-agency coordinating committee is an important step to ensure the proper coordination between the three executing institutions and between the donor and recipient of the technical assistance. Another important function of the coordinating committee is the overall evaluation of the project, the technical assistance, and the credit, extension and marketing services at the level of the small farmer.

1.5.2 Some limiting factors

Although the project seems to be well conceived and generally feasible and beneficial to Guyana there are some uncertainties or limiting factors which should be stressed.

First, there seems to be a contradiction in the project where reference is made to six Extension Centers and six Rural Marketing Service Centers as though they were completely separated one from the other. This should not and cannot be the case if there is to be an integration of the credit, extension and marketing services. The extension and marketing centers need not necessarily share the same compound but they should at least be in the same local community.

Secondly, careful attention should be given to the architectural and engineering designs of the basic infrastructure during the early stage of the project. The best design, size, building materials, etc., will vary from one site to the next and will only be perfected with experience, thus the first construction should be used as a pilot project to gain experience for those that follow.

In other countries experience shows that minimum levels of investment in permanent infrastructure is advisable in projects of this nature where many variables are still unknown.

Thirdly, in the terms of reference (annex 1) and in the description of the sub-elements, it is clear that no detailed institutional analysis has been carried out in any of the three executing institutions. Consequently, one of the first efforts of the technical assistance must be a détailed diagnosis of the actual situation and bottlenecks in each institution so as to identify needs for technical assistance and non-programmed consultants.

Lastly, it must be pointed out and stressed that the key to this project is the ability of three government institutions to provide basic and efficient services in credit, extension and marketing in a coordinated and integrated effort. This thus entails a considerable effort at institution building in not one, but three institutions. This in turn puts a considerable burden upon the consulting firm chosen to provide the technical assistance to promote effective coordination between these three institutions.

As is commonly known, institution building is a long, slow process and includes much more than the preparation of new organisational charts, manuals and short training courses. Although the estimated 70 man/months of technical assistance programmed to support the Food/Crop Programme for its three years duration should be sufficient, additional technical assistance on a much smaller scale should be programmed for a second stage follow-up, so as to guarantee continuity.

2. Technical Proposal

This tender for technical cooperation in marketing, credit and extension is made by the Inter-American Institute of Agricultural Sciences (IICA) as a complementary effort to its "Plan of Action in Guyana" described in the administrative proposal[1]. The proposal is in line with IICA's developmental philosophy of strengthening Government institutions so that they may provide more efficient services to the ultimate beneficiaries - the small farmers of the Caribbean and Latin America.

2.1 Overall objectives, goals and strategy for Technical Assistance

2.1.1 Objectives

The overall objectives of the IICA Technical cooperation proposal can be summarised as follows:

1. Create the institutional capabilities so that Government services in extension, credit and marketing arrive at the level of the small farmer on a timely and efficient basis.
2. Establish a system for the integration, coordination, and evaluation of the Government services in extension, credit and marketing.

The specific objectives will be presented in the following sections which describe the respective technical cooperation components.

2.1.2 Goals

The overall goals of the IICA proposal are as follows:

1. At the end of an approximately 3 year period adequate Government services in extension, credit and marketing should be available on a timely basis to a minimum of 800 producers of food crops through six Rural Integrated Services Centers.

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1. "Administrative Proposal", Technical Cooperation, Food Crop Production and Marketing Project, IICA, Georgetown - July 1979.

2. The Inter-Agency Coordination Committee should be provide services in coordination between the three executing agencies and have established a systematic process for evaluating and inducing improvements into the Government services of extension, credit and marketing.

2.1.3 Strategy

The existing situation as IICA sees it can be summarised as follows:

1. The basic problem at the level of the small farmer is a lack of services in extension, credit and marketing.
2. These services are not available due to a lack of resources and inefficient Government institutions.
3. The Food Crop Production/Marketing Programme to be implemented by the Government of Guyana offers a realistic solution to the problem of lack of resources.
4. The parallel technical assistance component, as a complementary effort, must strengthen the institutional capabilities of three key institution to deliver efficient services.
5. Those services must be delivered in an integrated and coordinated fashion which will allow evaluation and improvement.

In order to reach the overall objectives and goals IICA feels that it is necessary to follow a strategy based on an integrated system point-of-view. Under such an approach emphasis will be given to improving the inter-institutional coordination and integration of extension, credit and marketing services to assure that project objectives and goals will be reached. Figure 1 summarises overall IICA strategy. Under this strategy IICA will provide a package of technical cooperation which will include:

1. Diagnosis of institutional problems.

2. Technical assistance in basic research and investigation.

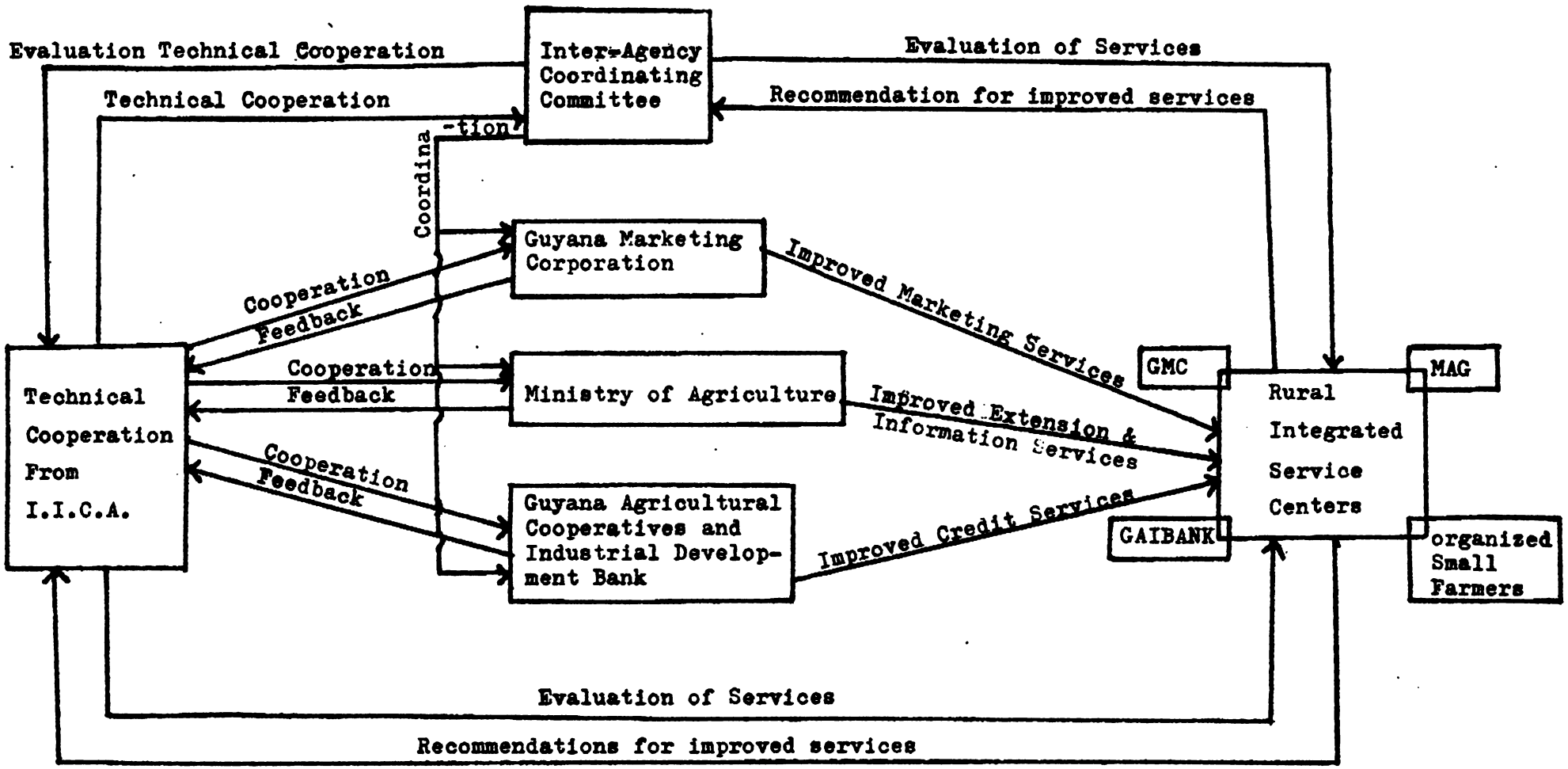
3. Training at diverse levels.

4. Specialised consultants in priority areas.

Such assistance will be provided to the three executing institutions and to the Inter-Agency Coordinating Committee, who will in-turn provide feedback information to IICA so as to facilitate adjustment of the assistance package.

The resulting strengthened institutions will provide improved services to the small farmers through the Rural Integrated Service Centers (RISC). The IICA will carry out continuous evaluations of the services disseminated through the RISC directly and in coordination with the Inter-Agency Coordinating Committee in an attempt to diagnose problems and suggest positive changes. The Inter-Agency Coordinating Committee will carry out a continuous evaluation of the technical cooperation programme and suggest reorientation and additional technical cooperation when necessary.

FIGURE 1. IICA Technical Cooperation as part of a Systematic Approach to strengthen Production and Marketing Services to Small Farmers.



2.2 Technical Cooperation to the Guyana Marketing Corporation

2.2.1 Background

The Guyana Marketing Corporation was established on January 1, 1964 with its main objective of developing and supporting effective marketing channels for food crops. As the official Government marketing corporation it was also charged with implementing the Government's minimum pricing policies. Over the years since its creation it developed into a complex entity getting involved in a number of activities foreign to its main mandate of a food crop marketing institution. The GMC suffered from a lack of experienced top and middle management personnel, primitive facilities and inadequate transport equipment all of which caused produce losses of up to 40% of the value of purchases. These losses did not permit the institution to generate enough income to keep up its purchases and become an effective influence in the market place. All of the above have placed the GMC in a precarious institutional and financial position.

The Government, aware of these circumstances, and having embarked in a major effort to reach food self-sufficiency is taking serious and appropriate steps to correct them. In the first place, GMC has divested itself of most of its non-food crop marketing activities and has under consideration further simplifications of its operations so as to concentrate solely in the marketing of food crops. Secondly, a new General Manager was appointed in February 1979, who in turn hired a Senior Accountant, a position that had been vacant for years. Both of these actions - the simplification of GMC's activities and management changes are expected to be of the utmost importance for the new role the GMC is to play. In addition, the need to modernise and construct new facilities, as well as to acquire the necessary equipment, was deemed of the greatest importance so as to avoid the continuation of the same problems. In light of the above, the Government

proposed as a first step solution the Food Crop Production/ Marketing Programme under consideration.

The Guyana Marketing Corporation employs about 360 people, about 20 of whom are in the category of Top management, 25 in middle management and the remainder as general workers.

2.2.2 Identification of basic institutional problems

In identifying the needs for technical cooperation to the GMC, it is necessary to first identify the basic problem areas. In marketing institutions the basic problems are best analysed from a functional point of view at three points: product assembly, product management, and product distribution.

2.2.2.1 Product Assembly

The principal institutional problems of GMC which cause the problems at the level of product assembly are the following:

1. The GMC lacks a clear and well defined strategy which defines the basic criteria to determine <u>what products</u> to purchase, <u>what volumes</u> of each and the <u>purpose</u> for such purchases.

2. The GMC lacks an adequate methodology to establish purchase prices and to quantify volumes of each product to be purchased.

3. There are serious deficiencies in the GMC methodology used for programming purchases of products on a local or regional basis. There exist no programmes whereby realistic estimates of weekly or bi-weekly purchases at each buying station can be made, which would facilitate the programming of necessary resources (dollars, transportation, personnel, etc.). The lack of such

programming eliminates the possibility of continual evaluation of purchases and their impact.

4. There is little relationship between the grades and standards used by the GMC, the characteristics of the national production, and the quality demands of the intermediary sector as defined by consumer tastes. In practice, GMC often purchases produce below minimal consumer standards which adds to post harvest losses.

5. There is a serious lack of plans, programmes, and instruction manuals to guide and develop an active extension programme at the buying stations.

6. The rural staff are not well trained in extension techniques in marketing, post harvest loss reduction, other areas. They do not have access to basic price and market information which small farmers need.

2.2.2.2 Product Management

This stage of the marketing system includes all those GMC marketing functions (transport, handling, storage, conservation, etc.) which occur between rural assembly and urban distribution. The basic problems at this level are the following:

1. The GMC does not have an integral system for technical-administrative control that would permit GMC to know and to evaluate at any time;

   (a) the quantity and quality of each type produce stored,

   (b) the available storage space at any given moment,

   (c) the real cost of storing each hundred weight of produce, and

(d) the overall financial situation of the institution. The lack of such a system stimulates inefficiency and increases costs.

2. There exist no grades and standards which would govern the preparation, storage and conservation of the products. This results in increased post harvest losses due to mishandling.

3. Lack of an adequate programme to control the operation and maintenance of the truck fleet results in excessive losses in time and produce (delays in transport add significantly to post harvest losses).

4. Statistical data is poorly collected, inadequately analysed and seldom disseminated. This tends to increase inefficient operations at all levels.

5. The GMC is sub-divided into 12 different divisions with different responsibilities and functions, however, none of these divisions have manuals which describe the respective responsibilities and functions. As a result every change in personnel results in a change of methods of operation, there is little inter-division coordination and integration and it becomes impossible to train human resources in a systematic and organised manner.

6. There is a serious lack of personnel well trained in the proper methods of handling and conservation of perishable produce.

It must be pointed out that all of the problems related to product management at this intermediate stage are directly related to the lack of planning and proper handling at the assembly stage. Thus any attempt to solve problems at this stage must be closely coordinated with solutions proposed at the other levels (assembly and distribution).

2.2.2.3 Product Distribution

Once the GMC has purchased, transported, stored, packaged, conserved or handled the product in some other way, the final stage is distribution to intermediaries, or directly to the end consumer. Institutional problems which arise at this point are the following:

1. There is a distinct lack of a clear and well defined marketing strategy which points out basic criteria for the decisions as to what products to distribute, to whom and for what purpose. The lack of such policy affects the operation and efficiency of the institution at all other levels.

2. The GMC has no satisfactory methodology which would, when based on supply and prices, establish: the possible need or intervention by GMC - the volumes of produce to be handled; the most feasible forms of intervention and their possible consequences; and the recommended price levels and possible implication on the market. Without such a methdology GMC interventions are strictly ad-hoc.

3. The GMC has no adequate methodology for programming the physical distribution of food stocks and particularly for moving produce between different regional collection and storage facilities.

4. The GMC has no systematic process for collection, analysis and dissemination of market and price information, including external prices as well as those of the internal market.

5. The GMC now has responsibilities for export marketing of food produce, however, it lacks experience, trained personnel, and basic market and price information in this area.

2.2.3 Objectives - goals and strategy of the Technical Cooperation in marketing

2.2.3.1 Objectives

The overall objective of the technical cooperation to GMC is to strengthen its abilities to deliver efficient marketing services, to the producers, the intermediaries and the final consumers of food products.

The specific objectives include the following:

1. Improve the GMC organisational structure.
2. Strengthen the GMC planning and programming capabilities.
3. Improve the GMC administrative and financial management capabilities.
4. Train GMC personnel in diverse areas including administration and management, accounting, data collection, processing and analysis, and different aspects of product handling and marketing.
5. Integrate Government services in marketing with Government services in credit and extension.
6. Provide necessary marketing services to organised small farmers through the Rural Integrated Service Centers.

2.2.3.2 Goals

The goals of the IICA proposal for technical cooperation to the GMC include the following:

1. Definition and implementation of an organisational structure adequate to the needs of GMC.
2. Definition and description of functions of all Key GMC personnel and divisions.

3. Preparation of all necessary administrative forms, vouchers, and manuals, describing their use.

4. Preparation of methodologies for programming GMC purchases and distribution of food products.

5. Definition and implementation of a methodology for controlling inventories of food products.

6. Definition and implementation of an accounting system adequate to the needs of GMC.

7. Definition and implementation of systems for data collection, analysis and dissemination.

8. Training of approximately 30 key persons in the use of methodologies, manuals of operation and other priority areas covered by this technical cooperation.

9. Establish an effective planning unit within GMC with the following responsibilities:

   - act as direct counterparts of technical cooperation,
   - make recommendations for restructuring the GMC,
   - coordinate all activities related to description of functions, division reorganisation,
   - define type of information required for planning purposes, and
   - develop methodologies for programming purchases, distribution and control.

10. Provide the necessary marketing services to the six Rural Integrated Service Centers so that they are able to satisfy their objectives.

11. Establish a system of constant evaluation of marketing services in the rural areas which will permit the

rapid identification and improvement of problem areas.

2.2.3.3 Strategy

So as to achieve the goals and objectives outlined above a strategy with the following sequence will be followed:

1. Definition of lines of communication and coordination.
2. Diagnosis of GMC.
3. Programming of activities and technical assistance.
4. Implementation of training programme.
5. Basic research and evaluation.

The most important instruments for the implementation of this strategy are discussed below.

2.2.3.3.1 Coordination

Due to the integrated nature of this project, efficient coordination will be the key to success. The principal responsibility for coordination between the executing agencies and with the firm offering technical cooperation will lie with the Inter-Agency Coordinating Committee. For this reason the IICA specialists (extension and credit as well as marketing) will work closely with this Committee and will programme and implement all activities with an active participation of the Committee.

2.2.3.3.2 Diagnosis

Although considerable information is available about GMC, insufficient data is available to programme detailed activities in those areas to be considered of highest priority.

As a first step in this proposal an interdisciplinary team of GMC specialist will be formed to work with the consultants to carry out a detailed diagnosis of the GMC institutional situation at: the assembly level (purchasing, handling, rural transport); the products management level (storage, packaging, conservation, transport, administration and control); and at the distribution level (selling, transport, etc.). The results will be analysed by the Inter-Agency Coordinating Committee and will serve as the basic for the final programming of priority areas and requirements in technical cooperation.

2.2.3.3.3 Technical Cooperation

Prior to the diagnosis of GMC the IICA macro-agricultural economist, who will serve as principal project coordinator and marketing specialist (24 or 30 months) will have arrived on board. His first responsibility will be to organise the Diagnosis of GMC, results of which will serve to prepare the final programming of all additional technical assistance.

Due to the diversity of needs in technical cooperation, IICA feels that it is preferable to contract several very specialised technicians (planning, programming, financing, accounting, product handling

and transport, grades and standards, etc.) for short periods (one to three months) rather than one or two specialists for longer periods. The IICA project coordinator will have the responsibility of programming the technical cooperation to ensure its optimum efficiency.

2.2.3.3.4 Training

Several types of training will be implemented under this proposal including that in the following areas:

- Methods of investigation
- Price and market information analysis
- Price and market information system
- Product purchasing and sales
- Product handling
- Post harvest loss reduction
- Grades and standards
- Small farmer organisation
- Business management
- Accounting and finance
- Organisation and management of equipment and basic infrastructure
- Personnel administration
- Planning and programming
- Export marketing
- Others.

The methods for carrying out the training will vary with the area, number of participants, degree of priority and available resources. The principal methods to be used will include the following:

Seminars: May vary from one hour to 2 days. The objective is to present and discuss a specific idea or concept related to the project.

Workshop: Duration from one-half to 5 days. The objective is to present and discuss an idea or concept, analyse it in depth and formulate general and specific conclusion.

Short Courses: Duration of one to two weeks with the objective of training people in specific areas. May be realised outside of Guyana.

Training Courses: Duration from 2 to 8 weeks with the objective of training people in a variety of areas related to the same topic. May be realised outside of Guyana.

On-the-job Training: This will be the principal method of training throughout the programme. It is basically a result of constant contact with the consultants and putting into practice the diverse methods and methodologies being introduced.

Reciprocal Training: IICA has offices in some 23 countries in the Caribbean and Latin America. Ten of these national offices have projects in marketing of food crops. In an attempt to promote international cooperation and improved communication of experiences in marketing,

IICA will organise, when considered of value, trips to other countries for Key GMC personnel to visit marketing projects and thus gain practical on-the-job experiences.

2.2.3.3.5 Research and Evaluation

To ensure that the technical cooperation is having its desired effect and that improved marketing services are reaching the planned beneficiaries, IICA will from time to time carry out basic research at all levels of the marketing system in an attempt to evaluate the effectiveness of the overall project and to identify new bottlenecks. A final evaluation of the technical cooperation, its impact and needs for continuity, will be carried out as a final step under this proposal.

2.2.4 Work plan and calendar of activities

In section 2.2.2 a series of institutional problems were identified. These problems can be grouped into eight major areas where technical cooperation is required. These eight areas and a brief description of each follow:

2.2.4.1 Planning

One of the first steps in the implementation of this project will be the definition of marketing strategies and the reorganisation of GMC so as to implement the strategies in an efficient manner. Technical cooperation will be required to assist in the development of a model or procedure whereby GMC can identify marketing problems requiring intervention, visualise and evaluate diverse strategies, and

define, implement and evaluate systematically the results of the strategies adopted. A special planning unit should be organised to carry out these functions and other planning functions as they may arise, as well as to coordinate the technical cooperation channeled through GMC.

2.2.4.2 Programming

This area is closely related to the former. Technical cooperation will be required as follows:

- Development of a methodology suitable for the physical planning of GMC interventions or purchases.

This methodology will be based on data collected by GMC and should permit the definition of:

(a) What products to purchase, volumes, locations, etc.

(b) Identification and programming of resource needs (financial, human, physical) for each intervention.

(c) Logistical support required (such as training of additional personnel, maintenance and operation of infrastructure and transport system).

(d) Complementary support required from extension and credit personnel.

- Determination of the type of information required for proper programming and the methods for data collection, processing, analysis and final use of the data.

- Design and implementation of a data system to meet the needs of GMC.

- Identification of the necessary changes required in the functional-organisational structure of GMC so as to effectively implement the programming methodology.

- Participation in the training of the necessary personnel responsible for these functions.

2.2.4.3 Administrative and technical control

Technical cooperation will be required to:

- Establish an adequate system for controlling the accounting and financial aspects of GMC in such a way that information is processed rapidly and is readily available for decision making.
- Establish an adequate system for inventory control so that at any given moment information is available on quantity and quality of stored produce, available space for storage and per unit real costs incurred by GMC for produce marketed.

2.2.4.4 Grades and standards

In this case technical cooperation will be used to:

- Establish a basic methodology based on the physical characteristics of the national production and consumer demand, which will permit a permanent evaluation of grades and standards used by GMC; and
- Prepare manuals on grades and standards of diverse products and train personnel in their use.

2.2.4.5 Training

Technical cooperation will play an active role in the organisation and implementation of seminars, courses and in-service training, however, so as to strengthen the GMC's capacity to train its own people, technical cooperation will be concentrated in the following areas:

- Advise in the preparation of a manual of positions and description of functions for each position and the determination of the level of training required for each position.
- Cooperation in the quantification of needs for specialised personnels over the short and medium run.
- Assistance in the design and implementation of a special unit responsible for planning and implementing a training programme.
- Assist in the definition of an institutional policy oriented towards personnel improvement through systematic training and promotion.
- Assist in the formulation of specific short and medium term training programmes.

2.2.4.6 Infrastructure and Transport operation and maintenance

The GMC has relatively little basic infrastructure of an electro-mechanical nature, however, what does exist should be put on inventory, evaluated and maintained where necessary. The technical cooperation from IICA will advise GMC's engineers in carrying out these activities.

In addition, the GMC often has difficulty in keeping its truck fleet in operation, mainly due to the lack of spare parts. Technical cooperation will be made available in an attempt to evaluate those spare parts most often required and establish a reserve which will reduce delays caused by breakdowns.

2.2.4.7 Price Information Service

Technical cooperation will be offered to assist the GMC establish a price information service. The nature of the assistance will be as follows:

- Help define and develop a methodology for collection and analysis of price data.
- Develop a system for publishing and disseminating the data opportunely so that it can be of use to the small farmers.

2.2.4.8 Technical Assistance (Extension)

Technical cooperation will be offered to GMC to upgrade its rural personnel by:

- Advising in the preparation of technical manuals for the marketing of food crops.
- Training the rural technical personnel in their use.

The principal activities in technical cooperation in marketing described above, with an estimate of man/months of cooperation required to develop them and an indication of their respective place in time are summarised in the following table No. 1.

Table No. 1 Sequential ordering of Technical Cooperation Activities and Man/Months requirement for Marketing sub-project

ACTIVITY	Man/Months of Technical Co-operation required	Project Month(s) in which activity takes place
1. Planning:		
1.1 Diagnosis of institutional problems	1/2	1
1.2 Reorganisation of GMC	1/2	1 - 6
1.3 Organisation of planning unit	1/2	1 - 3
1.4 Definition of marketing strategies	1	1 - 6
1.5 Definition of planning process	2	1 - 12
1.6 Training of personnel	1/2	1 - 24
2. Programming:		
2.1 Develop programming methodology	2	3 - 6
2.2 Definition of information requirements	1	2 - 6
2.3 Design data system	2	3 - 6
2.4 Changes in GMC organisation	1/2	3 - 6
2.5 Training of personnel	2	3 - 12
3. Administrative and Technical Control:		
3.1 Establish administrative control system	2	4 - 12
3.2 Establish inventory control system	2	4 - 12
3.3 Train personnel	2	4 - 12
4. Grades and Standards:		
4.1 Develop methodology	1	8 - 12
4.2 Prepare manuals	2	10 - 20
4.3 Train personnel	1	11 - 12
5. Training:		
5.1 Preparation of manuals of positions and functions	1	3 - 7
5.2 Quantify human resource needs	1/2	6 - 8
5.3 Creation of training unit	1/2	8 - 9
5.4 Definition of institutional personnel	1/2	8 - 10
5.5 Formulation of training programme	1/2	8 - 12
5.6 Participation in training activities	4	3 - 24
6. Infrastructure/Transport Operation:		
6.1 Inventory equipment	1/2	4 - 6
6.2 Design maintenance programme	1	6 - 7
6.3 Train personnel	1/2	6 - 7
6.4 Organise supply of spare parts	1	6 - 8
7. Price Information Service:		
7.1 Develop methodology and implement	2	3 - 9
7.2 Training personnel in use of methodology	1/2	4 - 5
7.3 Develop system for dissemination	1	6 - 9
7.4 Control and evaluation	1	6 - 24
8. Technical Assistance (Extension)		
8.1 Preparation of technical manuals	1 1/2	6 - 24
8.2 Training in use of manuals	1 1/2	9 - 24
T O T A L	40	

2.2.5 Technical Assistance Requirements

In the previous section, 33 specific activities have been identified which will require from two weeks to four months each of technical cooperation. Undoubtedly additional technical assistance requirements will be defined in the early stages of the project.

The major responsibility for meeting the technical cooperation requirements will lie with the macro-marketing specialist who will also act as overall project coordinator. The contract period for this specialist should be 24 man/months distributed in the following areas:

Planning	5	man/months
Programming	2 1/2	-do-
Administrative/Technical control	3	-do-
Grades and Standards	2	-do-
Training	3	-do-
Infrastructure & Transport Operation	1	-do-
Price Information System	4 1/2	-do-
Extension	3	-do-
TOTAL	24	

Technical cooperation will also be provided by a second marketing specialist and/or specialised short term consultants in the following areas:

Programming	5	man/months
Administrative/Technical Control	3	-do-
Grades and Standards	2	-do-
Training	4	-do-
Transport Operation	2	-do-
TOTAL	16	

IICA will contract the macro marketing specialist at the beginning of the project (See annex 2 for curriculum vitae). The short-term consultants will be contracted as the need arises and as mutually programmed between IICA, Guyana Marketing and the Inter-Agency Coordinating Committee from the list of available candidates presented in annex 2 and others.

The contracting of a second marketing specialist will be decided during the first two months of project implementation and will depend upon the results of the institutional analysis of GMC. The Inter-Agency Coordinating Committee, in consultation with IICA, and after evaluating the qualifications and expertise of the macro-marketing specialist, will decide whether it is to the advantage of GMC to hire an additional consultant for a period of 12 months or to hire several short-term consultants in specialised areas over the duration of the project.

2.3 Technical Assistance to GAIBANK

2.3.1 Background

The Guyana Agricultural and Industrial Cooperative Development Bank (GAICDB) was created as a new institution in 1973. It was to centralise all Government credit services to the sector with the purpose of increasing agricultural production through incentives.

The Bank's most important objective is to give credit as well as technical assistance to farmers, either individually or in groups (Cooperative Credit Societies, etc.) thereby providing a service which is critical to attain the overall development objective of self-sufficiency in food production and simultaneously improve living standards of the rural population.

Recently, the bank has expanded its operation to cover financing needs of agricultural industries.

The bank is organised with 10 branches located in the producing areas where a team of agricultural technicians (graduates of the School of Agriculture) provide credit supervision and technical assistance to the credit holders.

The bank has a total staff of 143 employees among the central offices and 10 branches, including the following:

- Economists - 6
- Accountants - 4
- Agricultural Technicians (School of Agriculture) - 72
- Secretaries - 13
- Others - 47

The project (sub-programme A) is to generate a line of supervised credit with the prupose of affecting some 800 small food crop farmers. This financing will cover a geographic area of 3750 acres. In these areas, two crops can be planted each year. Thus the annual net utilisation of land can be considered

to be 5,000 acres (rate of land used 1.33). The credit programme will be closely coordinated in its implementation with the sub-projects in Marketing and Extension which integrate the Food Crop Production and Marketing Project.

The area of influence of the project will be centered around the Marketing and Extension centers in all regions.

GAIBANK is a relatively young institution that has been adjusting its systems and procedures as it has gained experience. It is presently at the stage of consolidation of its actions. The recent expansion of the bank and the natural growth of the institution will require changes in its organisation and structure. It will be necessary to make an evaluation of the effectiveness of its operating procedure in light of the enlarged portfolio.

2.3.2 Definition of the Problem

The technical cooperation component, parallel to the project, has the purpose of strengthening the banking institution and increasing its capacity to provide improved services of supervised credit to the small farmer. Considering the actual situation in GAICDB and its needs to be attended by the expansion of the activities of the bank the following problem areas have been selected as most significant

Diagnosis of the present position of the bank in terms of the efficiency of its operation and organisational structure.

As it was mentioned earlier the bank is expanding its present project and because of additional functions as on industrial credit institution. It is therefore necessary to revise all of its operations and organisational structure in relation to the needs to execute a more efficient control of the credit operation and deliver an improved service to the food crop farmers.

This diagnosis should include the evaluation of:

a. The general organisation of the bank in terms of its objectives and new functions.

b. The present efficiency and efficacy of the system and procedures adopted by the bank, including its operation, administration, financing and accounting.

Within the context of a diagnostic analysis and evaluation, some particular problem areas are noteworthy:

- Adjustments are needed to take into account the expansion and new functions.
- Present administration of credit to the farmers bears a high cost.
- The information as it is collected and manually handled is not appropriate to achieve levels of improved efficiency in the decision-making process of the bank.
- The bank by an excessive centralisation of the decision process has reduced the efficiency of the credit operation.
- The development of the bank through a natural process of expanding its operation as time passes has resulted in the utilisation of operation, administration and accounting systems and procedures which are not necessarly selected in terms of the maximum level of efficiency. Therefore, the

need now arises to evaluate and then redesign them in relation to present objectives.

- The credit operations, specifically that directed to farmers have the problem of a need to establish special procedures adopted to the special case of supervise credit to farmers. Some of the characteristics of the credit like: lack or deficient guarantee for the loans; farmers are not usually aware of credit possibilities, requirement of production plans to which loan is to be attached, forms of desimbursement of the money and purchasing mechanism and then control of the execution of the production plan to monitor and reduce, when possible, the possibility of failure of the farmer and therefore of its capacity to repay the loan. All of these characteristics plus others call for particular procedures and accounting system coupled with a close supervision to the farmer. The system should then generate a flow of information between regions (branches) and central headquarters to allow for the most efficient decision-making planning and management control processes reducing average.

- The other element to improve the efficiency of the banking operation is to have a properly structured mechanism for portfolio analysis. The system should be properly housed within the structure of the bank, well staffed, with adequate methodologies and specially important with an information system design to provide the necessary data in time and quantity. This also requires that the recording mechanism be designed with adequate accounting systems in relation to the portfolio analysis.

It is necessary therefore to complete the diagnosis that the following studies be carried out:

a. Study the adaptation of accounting systems that will enable to record and generate adequate statistical and accounting information for the maximum efficiency of the decision-making, planning and control processes as well as other related to the requirements of the financing agency.

b. Study the adaptation of methodology for portfolio analysis in terms of data and analysis procedure to reduce bad debts.

c. Analyse the problem of decentralisation of the bank's operations in terms of the fúnction of the branches, and their relation to headquarters: delegation of authority and statistical and financial information, taking into account the new computorised data processing systems to be implemented in the future.

d. Study the establishment of an internal auditoring section as referred to in the terms of references.

2.3.3 Definition of the objectives, targets and strategy for the technical assistance.

2.3.3.1 Objectives:

Within the general objectives of the project that is to support the bank for the execution of the supervised food crop production marketing project, several specific objectives have been identified:

1. Evaluate the general organisational structure of the bank and its regional operation.
2. Evaluate and redesign present accounting systems and procedure.
3. Evaluate, define and adapt to the bank's needs a portfolio analysis procedure to reduce arrearage and improve banks efficiency.
4. Evaluate and define a mechanism of relation between headquarters and branches to improve the efficiency and the capacity of the bank to handle a larger number of credits and related services to the regions.
5. To assist the bank in the adaptation of a new computorised system and in the considerations of a data processing system.
6. Design the establishment of an internal auditing section.
7. Design and implement a training programme to support the operation of the bank on a continuous basis and in terms of the professional and administrative personnel.

2.3.3.2 Targets:

The achievement of the following targets will yield a reasonable level of success to the above established objectives. It is understood however that an evaluation system on the on-going operation of the technical cooperation will confirm, redirect or add new elements to this presentation.

The identified targets are as follows:

1. Organisational structure of the bank analysed and evaluated in terms of new function and objectives and organisational charts and manual of organisation describing the functions assigned and the basic responsibility of its staff completed and properly reported.

2. Statistical and accounting, recording and reporting system designed and properly reported.

   This system should permit the bank to improve its programming and control activities in the context of adapting well grounded and prompt decisions at the management level.

3. Portfolio system analysis procedures evaluated and redefined to adapt them to the bank's needs to reduce acreage and improve efficiency.

4. Schedule of accounts and accounting manuals integrated with the budgeting system evaluated and system designed and presented.

5. The following manuals will be presented, according to the result of the evaluation:

   5.1 Manuals of rules and procedures.

   (a) A control of collections, purchases, payments, loan dibursements, and other basic internal control procedures.

(b) Preparation of monthly and yearly financial statements.

(c) Preparation of monthly cash budgets.

(d) Calculation of yearly financial projections, including tables of origin and use of funds, proforma balance sheets and statements of estimated results (profit and losses).

(e) Manual of Internal Audit containing the annual work programme, methods and procedures to be used, and periodic reports to be prepared.

(f) Systems for the filing and custody of accounting records.

(g) Where appropriate, definition of the principal features of the equipment selected and preparation of data-processing rules based on the feasibility study carried out.

(h) Conduct of programmes for the orientation, and training of supervisory staff and personnel responsible for the operation and execution of such systems as may be implemented.

5.2 Manual/rules to be used within the bank branches.

6. Training programme designed and implemented.

7. Internal Auditing system presented.

2.3.3.3 Strategy

So as to achieve the goals and objectives outlined above a strategy with the following sequence will be followed.

a. Definition of lines of communication and coordination.

b. Evaluation and Diagnosis of the organisation and operating systems and procedures.

c. On the basis of the result of the evaluation, the activities and technical assistance will be programmed.

d. Design of the manual of rules and procedure.

e. Implementation of training programme.

f. Monitoring and follow-up.

2.3.3.3.1 Definition of the lines of communications and coordination

Due to the integrated nature of this project efficient coordination will be the key to success. The principal responsibility for coordination among the executing agencies will lie with the Inter-Agency Coordinating Committee. For this reason the IICA specialists (credit, extension and marketing) will work closely with this committee and will programme and implement all activities with an active participation of the committee.

2.3.3.3.2 Evaluation and Diagnosis

As a first step in this proposal on inter-disciplinary team from the GAIBANK will be formed to work with the consultants and carry out the detailed diagnostic study. The diagnosis shall contain:

a. An evaluation of the organisation, systems and procedures and portfolio supervision and the team's recommendation.

b. The conclusion of the evaluation.

c. Specific recommendations and proposed time table for carrying out the various tasks involved in the stages of design implementation and invaluating of results.

2.3.3.3.3 Technical Cooperation

Prior to the diagnosis of the GAIBANK the IICA specialist will have arrived on board. His first responsibility will be to organise the diagnostics evaluation and studies, results of which will serve to prepare the final programming of all additional technical assistance. He should also programme the arrival of the second specialist as well as other needed technical assistance. Due to the diversity of needs in technical cooperation IICA feels that it will be necessary to provide with several very specialised technicians' assistance in planning, computerised data processing, financing etc. The IICA specialist in Banking along with the project coordinator will have the responsibility for programming the technical cooperation to ensure its maximum efficiency.

2.3.3.3.4 Design of the manuals of rules and procedure. In coordination with the bank's team and decision-makers the evaluation of the existing manuals and procedures will be analysed and decision should be taken as to the needs to redesign some or all of them. The IICA specialist along with the bank's professionals will then proceed to develop them.

2.3.3.3.5 Training

Even though a training programme will be developed by the coordinated work of the IICA specialist and the bank's staff according to the training needs of the projects the following areas have been pre-identified as of importance for each department.

CREDIT DEPARTMENT

a. Evaluation and Monitoring of Sector Loan Performance

Training by practical attachment for a 3-month period for the Statistical and Research Officer of the Credit Department so that this section can develop the capacity to provide information on sector loan performance and enable a proper evaluation of the project as well as make realistic projections for future lending by the bank.

Training should cover the following areas -

- Methodology and procedures
- Collection of relevant statistics
- Analysis of data
- Evaluation of data.

b. Small Farmer Lending in Latin America and Caribbean

A programme will be implemented for observation tours and practical attachments for the General Manager, Chief Credit Officer and Disbursement Officer with Development Banks within Latin America and the Caribbean. This training should be centered around observation of operations in Development Banks which have established Small Farmer Lending Programmes in Food Crops.

ACCOUNTING DEPARTMENT

With the planned decentralisation of accounting operations and the need to cope with an increased volume of loans during the project period, it is envisaged that certain middle management positions will need to be created which will be filled from within. Training in Accounting Procedures and Management will therefore be necessary for the staff members. The following training needs have been identified.

In-service training will be developed within the Department for the Assistant Accountant, Accounts Supervisor and Senior Clerks. This will be supplemented with ex-Bank training from the Government Management Training System in Guyana. This will be done during the first year of the project. A minimum of 10 people will be involved.

With the need to improve the computer services now provided to the Accounting Department, as well as to improve the versatility of use of the Bank's computer, it is envisaged that training will be required for the Computer Supervisor.

TRANSPORT DEPARTMENT

The Food Crop Loan will need adequate back-up services in terms of transportation in the regions designated. In order to effectively service the project and having regard to the cost of maintenance of the equipment projected to be used by the Bank. The following areas of training for workshop staff within the Transport Department have been identified.

a. Training in Repairs and Maintenance of Fibre Glass Structure.

Training is required for the Transport Officer at a recognised Fibre Glass Establishment for 3 - 4 weeks in repairs and maintenance of Fibre Glass boats which form a significant portion of the Bank's fleet.

... 48(a)

b. Training in Repairs and Maintenance of Outboard Engines

Training is required for technicians in the maintenance and repairs of outboard engines which are the power sources of the river transport fleet of the Bank.

2.3.3.3.6 Monitoring and follow-up

To ensure that the technical cooperation is having its desired effect and that improved credit services are reaching the beneficiaries, IICA will carry from time to time on a pre-programme and pre-arranged schedule basic research at different levels in the credit system to evaluate the effectiveness of the credit system and identified new bottlenecks. A final evaluation of the technical cooperation, its impact and needs for continuity, will be carried out as a final step under this proposal.

2.3.3.4 Tools of the Technical Cooperation

In order to implement the proposed strategy the following will be used as supporting instruments:

- Diagnostic studies
- Special studies
- Elaboration of manuals, documents and other informative material
- Training of personnel
- Evaluation.

a. Diagnostic studies

The starting point of the technical cooperation will be an exhaustive analysis and evaluation of the present organisation of the bank. An evaluation will also be carried out of the effectiveness of the systems and procedures used in order to determine the limiting factors of the institution.

The knowledge of such elements will allow programming of specific areas of action and the adjustment that will be needed for the institution to achieve its programmed expansion satisfactorily.

b. Special studies

As a requirement of the technical cooperation, special studies will be carried out to complement and widen the results of the diagnostic studies.

The studies will be done in cooperation with staff and/or IICA's consultants and should provide an indepth knowledge of problems associated with decision-making. The main subject matters of the studies will be the following:

- Study of those accounting systems (general, budgeting

and cost accounting best suited for use in the Bank in collecting and reporting statistical and accounting information needed in the decision-making, planning and management control processes.

- Study of the classification and analysis procedures of the portfolio, in order to know if they provide the necessary data that would permit the establishment of adequate provision on bad debts.
- Study and definition of relation between headquarters and branches in relation to the delegation of authority and statistical and financial information, taking into account new data processing system to be implemented.
- Study the establishment of an internal audit section.

c. Elaboration of manuals, documents and informative materials

As an outcome of the diagnostic study a revision of the existing manuals of rules and procedures, instructions, and other documents will be carried out in order to adapt them to the programme requirements.

The new manuals and instructions will describe in full the operative systems, the sequence of activities for every process and will give instructions about action to follow in each case. Their purpose will be that of describing all possible courses of actions and alternatives that can occur during the execution. Therefore they will provide a guide that will guide the executing entity and the personnel at all levels.

The elaboration of the manuals should be carried out by an integrated team of bank personnel and consultants. The needs for manuals and documents will be decided during the execution of the technical cooperation based on the evaluation of the existing ones those listed in the terms

of references and others as they seem appropriate.

d. Training of personnel

The training and upgrading of human resources is one instrumental tool to which this technical cooperation will give particular importance.

Training will cover two aspects: 1) In-service training resulting from the activities of the consulting team and counter-part personnel. 2) Implementation of a training programme under the strenghtened and developed training unit of the bank.

In the first case, the active participation of the national counterparts in the actions implemented by the consulting group will allow them to gain experience and training in analysis, programming, procedures and methodologies development for each of the specific subjects.

The training of the personnel is a function of the institution itself. For this reason it is considered of importance to strenghten the internal structure of the unit, and design training programmes on systems, methods and procedures. The training programme will take into consideration aspects presented in the previous section 2.3.3.3.

2.3.4 Work Plan and Calendar of Activities

In the previous sections several problems were identified within the context of the objectives, specified objectives and targets of the technical cooperation. They are now grouped in the form of the activities and tasks to organise the operationalisation of the works for the execution of the technical cooperation.

The major activities identified are:

- Diagnosis on evaluation studies.
- Design and monitor the implementation of procedures.and new areas of work.
- Design and implement training programmes.
- Activities of monitoring and follow-up.

2.3.4.1 Diagnosis and Evaluation Studies

The first step in the execution of the technical cooperation will be the identification of a counterpart team that will work along with the consultants. The organisation of the Diagnostic studies will then be implemented with the definition of the methodology, a proposed schedule and a definition of responsibilities. Then the basic steps in the operationalisation for the execution of the studies are as follows:

- Definition of the methodology and scheduling the execution of the studies.
- Collection analysis and team discussion of conclusions.
- Writing and presentation of reports.

The evaluation of the organisational structure of the bank and its regional operation will also serve as the basis for programming the additional activities of the technical cooperation. However the following studies are also part of the evaluation:

- Evaluation of present accounting systems and procedures
- Evaluation of a portfolio analysis procedure adapted to bank's need.
- Evaluation of relation between branches and headquarters.
- Evaluation of the adaptation of a new computerised data processing system.
- Design of an Internal Audit Section.

The proper scheduling of the abovementioned studies will organise the implementation of the technical cooperation and define the needs of assistance in the implementation of the proposals once they have been accepted by the decision-makers.

2.3.4.2 Design and monitoring the implementation of procedures and new areas of work.

Even though the technical cooperation component will produce recommendation and advise on the adaptation of new procedures and or new organisation, the responsibilities of the consultants will also be that of helping to implement the recommendation and therefore assist in the actual execution of the credit component of the project.

The actions within these activities are the following for any of the proposals that will arise from the Diagnostic studies:

- Design of proposal of new procedure.
- Analysis and discussion of proposal with decision-makers.
- Design the implementation of the proposal.
- Analysis and discussion of implementation proposal with decision-makers.
- Assist in the execution of the proposal.
- Assist in the evaluation and supervision of the execution of the proposals.

The activity will therefore help in carrying out the proposal within the time span allotted for the technical cooperation. Some of the implementation proposals will have to be carefully coordinated with the extension and marketing component so that maximum efficiency in the project execution is achieved. Special problem areas for coordination are those related to the programmed assistance to farmers, in the developing of the credit component.

2.3.4.3 Design and implement training programme

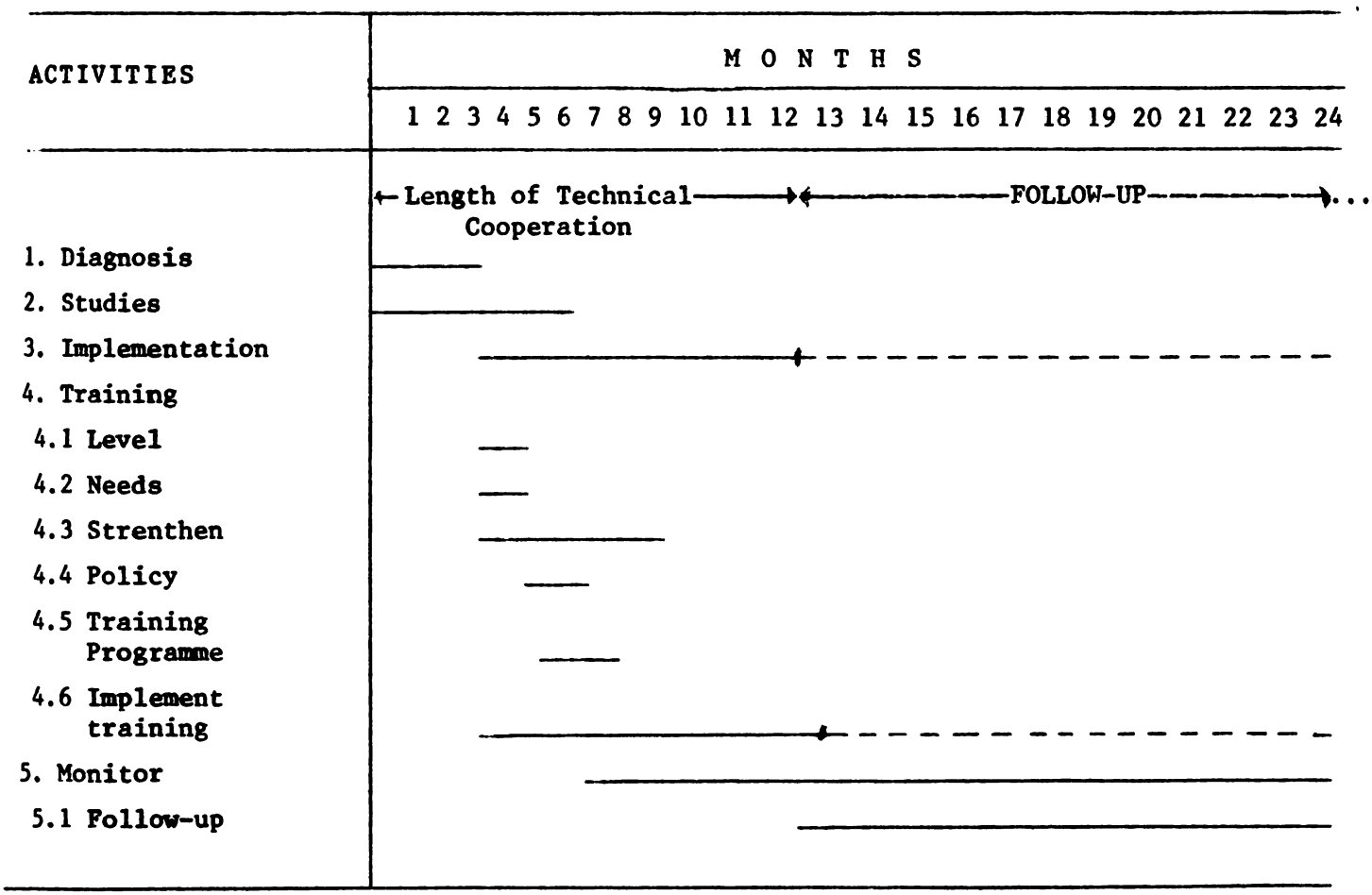
Although with the counterpart team the following actions will be implemented:

- Design and advise on the determination of the level of training required for each position.
- Design and advise in the quantification of needs for specialised personnels over the short and medium run.
- Assist and advise in the design and implementation of actions to strengthen the training unit.
- Assist and advise in the definition of an institutional policy oriented towards personnel improvement through systematic training and promotion.
- Assist and advise in the formulation of specific short and medium term training programme for the departemnts and branches of the bank.

2.3.4.4 Activities of monitoring and follow-up

These actions are designed to support the execution of the project during the implementation of the technical cooperation and afterwards. IICA's consultants will design a mechanic and a methodology to evaluate the ongoing execution of the supervise credit totthe farmer. They will also assist in the implementation of this system as well as carry on after the technical cooperation has ended pre-arranged actions to support the activities of the bank and identified new bottlenecks.

DIAGRAM 1 ESTIMATED CALENDAR OF ACTIVITIES



[a] The activities correspond to those defined in section 2.3.4

2.3.5 Characteristics of the Technical Cooperation

The activities which are envisaged within the 18 man/months of technical cooperation will be implemented during a total period of 12 months, allowing for the simultaneous presence of two or more consultants at the same time. This procedure will ensure proper coordination of the activities implemented.

The team will be integrated by the following personnel:

- One principal adviser who will coordinate the group. This person will be hired at the beginning of the implementation of the project for the 12 months. This adviser will be a high level professional with knowledge and experience accredited by work (completed) in public or private agricultural credit institutions in countries of the region. His main subject areas must be policy, organisation, administration programming and operation of agricultural credit.
- One short-term consultant (four months) with ample experience and knowledge in bank accounting. He should also have worked for credit institutions. The hiring date for this specialist should be determined by the consultant coordinator and the local counterpart in accordance with the established plan of work.
- Short-term consultants for a total of two man/months required to assist in the implementation of specific aspects of the technical cooperation (computer systems, data processing, communication methodology, etc.).

A common requirement will be fluency in English. Also, for the execution of the technical cooperation, the active and permanent participation of a multidisciplinary counterpart team to execute the actions, supply information and coordinate with high level staff will be required.

2.4 Technical Assistance to the Extension and Education Division of Ministry of Agriculture

2.4.1 Background Information

The Extension services of the Ministry of Agriculture has been in existence since 1901.

Under the direct authority of the Minister of Agriculture the Administrative Head is the Permanent Secretary, and under him there are four departments as follows:

- Administration and Finance
- Agriculture
- Hydraulics
- Lands & Survey

The Agriculture Department, headed by a Chief Agricultural Officer, has six Divisions namely Crop Science, Soil Science, Resource Development and Planning, Extension and Education, Veterinary and Livestock Science and Fisheries.

The Extension and Education Division is headed by a Principal Agricultural Officer, having 4 sections namely Extension Services, Training, Communications and Bees.

There are six functional agricultural districts. These districts do not match the country's political divisions except for the Berbice Region which is all one district and has the largest staff of all the districts.

In each district the Extension staff is composed of Agricultural Officers and Agricultural Assistants.

2.4.1.1 Functions of the Extension and Education Division

The functions of the division are basically concerned with technical assistance, distribution of seeds and fertilizers and conducting of training programmes for farmers. They are summarised as follows:

1. Promotion of increased production and productivity.
2. Education of the clientele using the basic extension techniques.
3. Leadership, development and organisation of production groups.
4. Purchase and sale of inputs to farmers as needed for production.
5. Provision of Plant Protection Services.

The functions do not cover the traditional work of Extension related to women and youth. Home economic assistance is done by the Ministry of Health through schools and community centers, and rural youth work by an Agricultural Officer attached to the Ministry of Education.

2.4.1.2 Composition and Functions of Extension Personnel

The Division is headed by the Principal Agricultural Officer who is appointed by the Ministry of Agriculture and his functions are:

- To administer the services of the Division in terms of budget and personnel matters.
- Supervise the overall technical programme and its execution.
- Provide technical and administrative backstopping to the field officers.

- Evaluate the performance of the personnel.
- Coordinate the overall work of the Extension Service with other Agencies.

2.4.1.3 Agricultural Officer

There is one Agricultural Officer in each district. His main function is to supervise the staff stationed in that district. His functions are to provide leadership to the extension staff, improve the effectiveness of teaching, stimulate professional ability, improve the material and the methods of teaching and analyse the programmes and results obtained. At the moment there are 10 Agricultural Officers in the MOA stationed in the districts.

2.4.1.4 Agricultural Field Assistant (AFA)

They are responsible to their Agricultural Officers for all extension work in the villages to which they are assigned. These officers live in their districts and perform the basic extension functions being in direct contact with the farm community.

2.4.1.5 Personnel

In total, technical staff of the division amounts to 54, including 43 Agricultural Field Assistants, 10 Agricultural Officers and 1 Principal Agricultural Officer.

In terms of the clerical personnel, a breakdown is as follows:

Secretaries	-	13
Clerks	-	7
Drivers/mechanics	-	12
Captain/Engineers	-	2
Boat Hands	-	2
		36 C/f

		36 B/f
Nursery, farm hand, Watchmen, Cleaning and other	-	91
TOTAL		127

All employees are under the general Civil Service Administration.

2.4.2 Definition of Problems and Needs for Technical Cooperation

It may be recognised that only when the difficulties, shortages or problems become very evident and perfectly described, that we are in a position to formulate strategies to combine existing resources, in an attempt to improve or solve them. Problems are nearly always many in number, and varied and this difference lies in the nature and magnitude in which they affect the progress of the society.

An attempt tis now being made to describe some of the major problems of the Guyana Extension Service. They are the result of a revision of available literature, interviews with extension staff and information from a survey of extension agents made in 1977. It must be realised that problems are being defined at a pre-implementation stage. Therefore, allowance should be made for adjustments after information is collected for the diagnostic study, suggested as a first activity.

A preliminary summary of the principal problem areas is as follows:

1. The absence of a clear and well accepted philosophy on the part of extension personnel about the nature, scope, purpose, clientele and policy for executing programmes.

2. There is a shortage of extension personnel trained in the methods and principles of planning, programme preparation and implementation.

3. There is lack of a clear and broad system of evaluation involving: results obtained at farm level, effectiveness at present techniques used, personnel accomplishments, teaching methodologies and production constraints.

4. There is lack of well trained personnel in the complementary areas of agriculture such as farm management marketing and other areas of the social sciences, very closely related to the field of extension work.

5. Extension field personnel do not have adequate supervision, particularly from an administrative and educational stand point.

It is almost universal that most extension organisations consider the lack of funds as their major problems rather than the problems of efficiency, or the ability to use available funds in the most efficient form. Another commonly enunciated problem is the apparent lack of experience and/or leadership quality of the extension worker. Since there is no scale that can be used to measure the degree in which these problems affect the work of an agency, it may be said that such problems, have been recognised in the case of Guyana but are not specifically defined. It is hoped that the implementation of the project will result in their solution.

2.4.3 Definition of Objectives, Targets and Strategy of the Technical Cooperation

- General Objective

The general objective of the technical cooperation of the extension sub-project is to assist and strengthen the Ministry of Agriculture by increasing the capabilities of its Extension and Education Division. This will lead to increased assistance to farmers, both small and medium sixed, and hopefully result in increased production and a rise in the standard of living.

The strenghtening and assistance should stress the following specific objectives:

1. To assist the Extension and Education Division in making a diagnosis of the present situation of the system and to identify major problems. The main problem areas are: extension principles, administration, planning, personnel policy, programme execution, supervision, evaluation and reporting and identification of training needs.

2. To set up a frame of reference for extension work and assist in the elaboration of an indicative plan for the extension division which should include the nature, scope, personnel and strategy for executing the programme. Also the articulation of a basic philosophy of extension and operating procedure to guide the work of the extension staff.

3. To elaborate and participate jointly with personnel of the training unit in the execution of a training programme for extension staff. The training programme will cover areas of philosophy, planning, methodology, supervision and evaluation of extension.

4. To review and organise the publication of reference materials concerning extension education, which should be used, as teaching material for training.

- To prepare a final report based on a guide line of the activities executed and major results obtained on the technical cooperation.

2.4.3.1 Specific Targets

Targets for objective No. 1

a. Diagnostic study made including major problems of the extension service and training needs.

b. Indicative general plan elaborated as a base of a more comprehensive extension policy.

Targets for objective No. 2

a. Document elaborated about the foundation of the extension education service in Guyana.

b. Document presented and discussed with extension executives as a basis for a philosophical orientation of the extension education service and elaboration of relevant policies.

Targets for objective No. 3

a. Training programmes prepared by consultant/local counterpart team.

b. Six training courses related to Extension Education and two related to agriculture offered. Each one of the three types of extension training courses would be repeated once.

c. Fifty four extension personnel attend at least one of the extension education courses.

d. Twenty extension personnel attend training courses on agriculture.

Targets for objective No. 4

a. Local and foreign extension and education references reviewed and selected for improving the local collection of reference materials in extension education available at the Division library.

b. Strict selection of reading extension materials done to be used as teaching aids.

Targets for objective No. 5

a Final report of the extension technical cooperation elaborated.

b. Report printed and distributed among extension personnel.

2.4.3.2 Strategy to execute Technical Cooperation

Strategy to accomplish objective No. 1

1. A counterpart team will be formed to make the diagnostic study about the actual situation of the service and to identify training needs.

2. The team will then, along with the consultant, collect and analyse relevant data and write a final report.

3. This diagnostic study will be discussed among extension officers and a final proposal will be submitted.

Strategy to accomplish objective No.2

1. A counterpart team will be organised along with the consultants who will generate a general plan for the Extension and Education Division. A guideline that could be used for the proposal may be as follows:

Targets for objective No. 4

a. Local and foreign extension and education references reviewed and selected for increasing the local collection of reference materials in extension education available at the Division library.

b. Strict selection of reading extension materials done to be used as teaching aids.

Targets for objective No. 5

a Final report of the extension technical cooperation elaborated.

b. Report printed and distributed among extension personnel.

2.4.3.2 Strategy to execute technical cooperation

Strategy to accomplish objective No. 1

1. A counterpart team will be formed to make the diagnostic study concerning evaluation of the service and to identify training needs.

2. The team will use the data, with the consultant, collect and analyze relevant data and make a final report.

3. This diagnostic study will be discussed among extension officers and a final proposal will be elaborated.

Strategy to accomplish objective No. 2

1. A counterpart team will be organized along with the consultant who will generate a general plan for the Extension and Education Division. A guideline for the proposal will be at hand.

i. Historical information about the Extension Service.

ii. Foundation of Extension and Education.

- Definitions: Conceptual bases; Operative procedures; Institutional structures.
- Technical, social and economic objectives of the Extension service.
- Frame of reference: Clientele to be reached; Structural changes required for rural development; Marketing support; Support from other organisms; Coordination; Participation; Budgeting; Methodology; Technology; Training personnel; Communication; Supervision; Evaluation; Programming; Directing; Personnel; Filing; Reporting.

iii. Organization of the Extension Service.

- Structure
- Functional description

iv. Implementation of plan for the Extension Service.

- At the National level.
- At the Regional levels.
- At Community levels.

2. The document will then be discussed with the Extension personnel and if necessary revised on the basis of this discussion. It will then be presented as a foundation for the elaboration of a general policy guideline for the Extension service.

Strategy to accomplish objective No. 3

1. The consultant team along with local counterpart, will organise and elaborate a training programme.
   - The programme should include and describe the; objective of training, contents of training, methodology to be used, quantity and quality of people to be trained, material to be printed or prepared, professors to be provided, budget and finance, timing and schedule, and evaluation.
   - The training programme should cover: Philosophy and planning in extension, teaching methodology in extension work, supervision and evaluation in extension.
2. Each training course should be repeated once, hence the total group of extension trainees will be divided into two sets of approximately 20 people.
3. In relation to the training opportunities in agriculture, the team will, along with research personnel of the Ministry and IICA organise the training programme.
   - The training programme should cover at least the basic points which are of immediate application for agricultural production in the selected areas of the project.

Strategy to accomplish objective No. 4

1. The consultant team will, with the assistance of the local counterpart, review and collect all local references on extension education and related matters. It will also generate an English Bibliography on extension and social sciences. Some of the references may be obtained from centers like CIDIA, CIAT, BID,

IBRD and Universities of English speaking countries.

2. The consultant team will also prepare a budget which would allow the acquisition of outstanding references.

3. The material selected should be classified and stored in the Division Libraries along with any other teaching aids.

Strategy to accomplish objective No. 5.

- The final report will be elaborated by the consulting team, assisted by the local counterpart and will be presented at a seminar meeting. The following areas can be used as guidelines for its preparation:

GUIDELINES FOR FINAL PROJECT REPORT.

i. Background information on the project.

ii. Period covered.

iii. Description of all activities completed and those programmed but not realised.

iv. Results obtained per activity.

v. Analysis and evaluation of results.

vi. Statistical summary of the project, implementation, conclusions and recommendations.

a. Recommendation for improving the extension and education division, and the services of these divisions to the farmers.

b. Recommendation for improving the work done and for the organisation and implementation of similar projects.

2.4.4 Work plan and calendar of activities

ACTIVITY	Man/Month of Technical cooperation required	Project month(s) in which activity takes place
1. Diagnosis		
Integrate group of work	1/8	1
Design of methodology	1/4	1
Discussion of the design	1/4	1
Data collection	3/4	1 - 2
Data analysis	1/2	2
Elaboration and presentation of the report	1/4	2
Printing of report	1/4	2
2. Extension Policy		
Design the guideline	1/4	3
Prepare general plan	1	3 - 4
3. Training extension personnel		
Preparation of extension training programme	2 1/2	4 - 7
Execution of training programme	3	7 - 11
Preparation of Agr. training programme	1/4	4
Execution of Agr. training programme	1/4	5 - 6
4. Collecting relevant material		
Reviewing and requesting reference materials	1/2	1 - 12
Organising and storing of reference materials and the printing of teaching aids	1	4 - 7
5. Reporting		
Preparation of final report	1/2	12
Printing	1/2	12 - 13
T O T A L	12	

As can be seen the Technical Cooperation on the part of extension will require 12 man/month periods. Taking into account that this is very narrow, provision should be made for an additional month for recruitment and repatriation of the consultant.

2.5 Technical assistance to the Inter-Agency Coordinating Committee

2.5.1 Definition of Problem

In the overall strategy being proposed by IICA the Inter-Agency Coordinating Committee will have the major responsibility for success or failure of the project due to its key role for overall coordination and integration of services of three major institutions. Since this Committee is being formed specifically for the implementation of the Food Crop Production/Marketing Programme and therefore lacks experience it will probably require technical cooperation in the following areas:

- Definition of a methodology for ensuring an adequate coordination and integration of the extension, credit and marketing services at the Rural Integrated Marketing Centers.
- Coordination of the overall programming and use of technical assistance (that from IICA as well as other sources such as AID and EEC).
- Implementation of a procedure for controlling and evaluating the progress of the project.

2.5.2 Objectives and strategy

The objective of this technical cooperation to the Inter-Agency Coordinating Committee is to help create the conditions whereby it may carry out its task to a successful end thus improving the chances that the overall project objectives and goals will be reached.

The strategy to be followed will be simply that of close coordination between the IICA project coordination and the Inter-Agency Coordinating Committee to assure organised planning and implementation of activities.

2.5.3 Technical Assistance Requirements

The technical cooperation required here will be provided by the macro-marketing specialist (IICA project coordination) with the support of the IICA Director in Guyana, during the entire project period but at no additional programme cost.

ANNEX No.1

TERMS OF REFERENCES
FOR THE
TECHNICAL COOPERATION

TERMS OF REFERENCE

Subproject 1 - Ministry of Agriculture-Extension Services

The firm to be hired under the proposed technical cooperation would provide an expert in agricultural extension services for approximately 12 months to perform the work outlined below:

(a) Assist the Extension and Education Division in the preparation of the basic manuals and instructions that would regulate the technical action of the Division;

(b) Instruct the national personnel in proper techniques for the preparation of the annual work programmes for the extension services;

(c) Outline the systems for evaluation - initial and periodical - of the results obtained by the producers assisted by the Extension Division, in terms of technology transfer, financial results, capacity for obtaining and repaying loans and other appropriate indicators.

(d) Recommend appropriate types of extension services to be provided in relation to frequency and intensity, outlining the principal characteristics of form results; and

(e) Assist in the preparation and execution of training courses to be given to the Division's technical personnel, producers and other technical personnel from Government agencies involved in the rural sector.

TERMS OF REFERENCE

Subproject 2 - Guyana Marketing Corporation (GMC)

A. With regards to (i) Administration, Organization and Methods and (ii) financial management, the consulting firm will perform, but not be confined to, the following tasks, expected to require approximately 36 man/months in the form of a consultant for 24 months for tasks under (i) and a consultant for 12 months for tasks under (ii):

I Diagnosis

1. Evalute effectiveness of existing operational, administrative, financial and accounting systems and procedures of GMC. Special emphasis should be put on appraisal, disbursement, supervision and inventories control.

2. Study and define accounting systems (general, budgetary and cost accounting) best suited for use in the Guyana Marketing Corporation in generating the statistical and accounting information needed for providing inputs to decision-making, planning and management control processes.

3. Study of feasibility and desirability of improvement of the present data process equipment for financial, accounting and statistical systems.

4. Study establishment of an Internal Audit Section taking in consideration the following:

   (a) physical location and hierarchy dependency,

   (b) working programme,

   (c) staffing needs,

   (d) operational procedures, and

   (e) issue and destination of reports.

5. Submit to GMC and IDB a diagnostic report containing:

   (a) comments based on the evaluation made (organization, systems, procedures and financial contracts)

   (b) conclusions derived from evaluation; and

   (c) specific recommendations and proposed timetable for carrying out the various tasks involved in the stage of design, implementation and checking of results.

II Design

The consultants shall provide, if necessary, as a result of the evaluation, the following:

1. Organization chart and manual of organization for the Guyana Marketing Corporation, describing functions assigned and basic responsibilities of its staff.

2. Description of administrative routines to be followed, as well as forms and vouchers to be used.

3. A statistical and accounting report system that will permit the programming and control of the Guyana Marketing Corporation's activities and adoption of well-grounded and prompt decisions as the management level.

4. Systematic inventory analysis.

5. Schedule of accounts and accounting manual integrated with the budgetary system.

6. Manuals of rules and procedures for:

   (a) Control of collections, purchases, payments and other basis internal control procedures.

   (b) Preparation of monthly and yearly financial statements.

   (c) Preparation of monthly cash budgets.

   (d) Calculation of yearly financial projections, including tables or origin and use of funds, pro-forma balance sheets and statements of estimated results (profit and losses).

   (e) Manual of Internal Audit containing the annual work programme, methods and procedures to be used, and periodic reports to be prepared.

   (f) Systems for the filing and custody of accounting records.

   (g) Where appropriate, definition of the principal features of the equipment selected and preparation of data processing rules based on the feasibility study carried out.

   (h) Conduct of programmes for the orientation, and training of supervisory staff and personnel responsible for the maintenance, operation and execution of such systems as may be implemented.

III Implementation

The consultant firm shall cover the following phases:

1. Active participation in the start-up and adjustment of the systems, procedures and recommendations developed in the preceding stages, to a point where they are operating satisfactorily.

2. Where appropriate, active participation in installation and operation of data-processing, including the writing of programmes.

3. Training of personnel responsible for operation and execution of the new systems.

IV. Control of Results

This will comprise the final evaluation of the system put into practice and will be carried out through a final visit to be made after a period of four to six months after final installation, for the purpose of verifying that they are operating properly.

V. Reports

The consultants should submit to Guyana Marketing Corporation and to the Inter-American Development Bank besides the diagnosis report, quarterly reports, and a final report at the end of the control of results phase.

B. With regards to the marketing information mechanisms, the objective would be to strengthen existing statistical data systems needed for a more effective management decision making within GMC. For this purpose, it is expected that the consulting firm would supply the services of a marketing specialist for approximately 4 months to perform, but not be confined, the following tasks:

(a) Review and revise existing GMC data series relevant to managerial decision making, including price and market information;

(b) test, modify and implement collection and analysis of selected statistics, and prepare procedural manuals;

(c) train local personnel to generate and analyze resulting data series in a timely manner.

TERMS OF REFERENCE

Subproject 3 - Guyana Agricultural and Industrial Cooperative Development Bank (GAIBANK)

With regards to: (i) Organization and management; and (ii) Portfolio Analysis and Control, the consulting firm will perform but not be confined to the following tasks expected to require approximately 18 man/months in the form of a consultant for task (i) for 6 months and a consultant for task (ii) for 12 months:

I Diagnosis

1. Evaluation of the general organization of the Guyana Agricultural Cooperative Development Bank, in order to determine the structure and functions of the Bank that would be best suited to deal with its objectives, considering their new functions of an industrial credit institution.

2. Evaluation of the effectiveness of existing operational, administrative, financial and accounting systems and procedures adopted by the Bank. Special emphasis should be taken in the areas of appraisal, disbursement, supervision and portfolio control.

3. Study and definition of those accounting systems (general, budgetary and cost accounting) best suited for use in the Bank in generating the statistical and accounting information needed for providing inputs to the decision-making, planning and management control processes; and the portfolio information as required by IDB.

4. Study of the classification and analysis procedures of the portfolio, in order to know if they provide the necessary data that would permit the establishment of adequate provision on bad debts.

5. Study and definition of relations between headquarters and branches, specially related with delegation of authority and statistical and financial information.

6. The study should take in consideration the new data process system to be implemented in the near future.

7. Study the establishment of an Internal Audit Section taking into consideration:

   (a) Physical location and organizational dependency

   (b) working programme

   (c) staff

(d) operational precedures

(e) issue and destination of reports

8. Submission to the GAIBANK and the IDB of the diagnosis report which shall contain:

(a) Comments based on the evaluation made (organization, systems and procedures and portfolio supervision).

(b) Conclusions derived from the evaluation.

(c) Specific recommendations and a proposed timetable for carrying out the various tasks involved in the stages of design, implementation and checking of results.

II <u>Design</u>

The consultant firm shall provide, if necessary as a result of the evaluation, the following:

1. The organizational chart and manual of organization of the Bank, describing the function assigned and the basic responsibility of its staff.

2. A statistical and accounting report system that will permit programming and control of the Bank activities and adoption of well-grounded and prompt decisions at the management level.

3. Portfolio system analysis that will include an updated program for arrearage reduction.

4. A schedule of accounts and accounting manual integrated with the budgetary system.

5. Manuals of rules and procedures for:

(a) Control of collections, purchases, payments, loan disbursements, and other basic internal control procedures.

(b) Preparation of monthly and yearly financial statements.

(c) Preparation of monthly cash budgets.

(d) Calculation of yearly financial projections, including tables of origin and use of funds, pro-forma balance sheets and statements of estimated results (profit and losses).

(e) Manual of Internal Audit containing the annual work programme, methods and procedures to be used, and periodic reports to be prepared.

(f) Systems for the filing and custody of accounting records.

(g) Where appropriate, definition of the principal features of the equipment selected and preparation of data-processing rules based on the feasibility study carried out.

(h) Conduct of programmes for the orientation, and training of supervisory staff and personnel responsible for the operation and execution of such systems as may be implemented.

6. Manual/rules to be used within the Bank branches.

III Implementation

The consultant firm shall cover the following phases:

1. Active participation in the start-up and adjustment of the systems, procedures and recommendations developed in the preceeding stages, to a point where they are operating satisfactorily.

2. Where appropriate, active participation in the installation and operation of data-processing, including the writing of programmes.

3. In parallel fashion, start-up of the programmes for the training of personnel responsible for the operation and execution of the new systems.

IV Control of Results

This will comprise the final evaluation of the systems put into practice and will be carried out through a final visit to be made after a period of four to six months after final installation, for the purpose of verifying that they are operating properly.

V Reports

The consultants should submit to the GAIBANK and to the IDB, besides the diagnosis report, quarterly reports, and a final report at the end of the control of results phase.

ANNEX No 2

IICA STAFF ASSISTING THE PROJECT

The following is a selection of IICA professional staff related to the field of Activity of the project. They can provide additional assistance in specific areas that could be critical to the project.

NOMBRE:	Juan Antonio Aguirre González
NACIONALIDAD:	Cubana
ESPECIALIDAD:	Planificación Agrícola
PAIS SEDE:	Costa Rica
CARGO ACTUAL:	Jefe, División de Elaboración de Proyectos

Fecha de ingreso al IICA: diciembre de 1964

Estudios realizados y títulos obtenidos:

B.S.A. Economía Agrícola y Zootecnia, Universidad de Florida, E.U.A., 1962.

M.S. Economía Agrícola y Ciencias Políticas, Universidad de Florida, E.U.A., 1964.

Ph.D. Planificación Agrícola Regional y Teoría Económica, Cornell University, E.U.A., 1969.

Cargos desempeñados:

Economista y Programador Agrícola, Dirección Regional del IICA para la Zona Norte, Guatemala.

Profesor de Economía Agrícola, Centro Tropical de Enseñanza e Investigación, Turrialba, Costa Rica.

Profesor de Economía Agrícola (Crédito y Contabilidad) Escuela Agrícola Panamericana El Zamorano, Honduras.

Publicaciones principales:

AGUIRRE, J.A. Economía, tecnología y rentabilidad de la producción de leche en los trópicos de América Central, San Carlos, Costa Rica. IICA Publicación Miscelánea no. 66. 1969. 98 p.

_____. Economía, tecnología y rentabilidad de la producción de carne en los trópicos de América Central: San Carlos, Costa Rica. IICA. Publicación Miscelánea no. 69. 1970. 100 p.

SIMOES LOPES NETO, A. y AGUIRRE, J.A. Costos de replantación de cacao. In Proceedings of the American Society for Horticultural Science. Tropical Region 15:31-48. 1971.

AGUIRRE, J.A. La regionalización agrícola: métodos, usos y problemas. In Seminario Nacional sobre Zonificación Ecológica de Cultivos y Regionalización Agrícola de Honduras, Tegucigalpa, 1973. s.l., 1973. 34 p.

NOMBRE:	Jerry Lee LaGra
NACIONALIDAD:	Estadounidense
ESPECIALIDAD:	Comercialización - Desarrollo de la Comunidad
PAIS SEDE:	República Dominicana
CARGO ACTUAL:	Especialista en Comercialización Agrícola

Fecha de ingreso al IICA:	16 de octubre de 1972
Estudios realizados y títulos obtenidos:	B.S. Agricultura, Washington State University, Pullman, Washington, E.U.A., 1968. M.A. Economía Agrícola, Washington State University, Pullman, Washington, E.U.A., 1969.
Otros estudios importantes:	Estudios sobre América Latina, Colegio de Agrícultura y Artes Mecánicas, Mayaguez, Puerto Rico, 1962.
Cargos desempeñados:	Especialista en Preparación de Proyectos Agrícolas, IICA, Port-au-Prince, Haití, 1972-73. Especialista en Desarrollo Rural, OEA, Port-au-Prince, Haití, 1971-71. Especialista en Cooperativas, American Technical Assistance Corporation, Washington, D.C., E.U.A., 1971. Especialista en uso de la tierra, OEA, Port-au-Prince, Haití, 1969-70. Especialista en Desarrollo de recursos hidráulicos, Oficina de Desarrollo de la Comunidad, AID, Santo Domingo, República Dominicana, 1965-66.
Publicaciones principales:	LA GRA, J.L. Mission d'Assistance Technique Integree, Chapitre 5 Agriculture et Chapitre 7 Utilisation de la terre. Secretariat General, Organization des Etats Americains. Washington, D.C. 1972. DUPLAN, V. y LA GRA, J.L. Transport de produits agricoles vers Port-au-Prince. Port-au-Prince, Bureau de l'IICA en Haití. 1975. 91p. GIRAULT, C. y LA GRA, J.L. Caractéristiques structurelles de la commercialisation interne des produits agricoles en Haití. Port-au-Prince, Cureau de l'IICA en Haiti, 1975. 53 p. LA GRA, J.L., CHARLESTON, W. y FANFAN, G. Les marchés publics d'Haiti. Port-au-Prince, Bureau de l'IICA en Haiti, 1975. 97 p. _____. Prix des produits agricoles dans les marchés haitiens. Port-au-Prince, Bureau de l'IICA en Haiti, 1975. 50p.

NOMBRE:	Ignacio José María Ansorena Porta
NACIONALIDAD:	Uruguaya
ESPECIALIDAD:	Extensión Agrícola
PAIS SEDE:	Ecuador
CARGO ACTUAL:	Director de la Oficina del IICA en Ecuador

Fecha de ingreso al IICA	1°de enero de 1956
Estudios realizados y títulos obtenidos:	Ingeniero Agrónomo, Universidad de la República Oriental del Uruguay, 1954. M.S. en Extensión Rural, Universidad de Cornell, E.U.A., 1955. Ph.D. en Extensión Rural, Universidad de Cornell, E.U.A., 1970.
Cargos desempeñados:	Especialista en Extensión Agrícola, Oficina IICA en Agrentina, 1973-1975. Extensionists del IICA-CIRA, Bogotá, 1970-1973. Extensionista Agrícola Asociado del Departmento de Desarrollo Rural del Centro Tropical de Enseñanza e Investigación del IICA-Turrialba, 1964-1970. Extensionista de la Zona Sur. Centro de Investigación y Enseñanza para la Zona Templada, La Estanzuela, Colonia Uruguay, 1962-1964. Profesor de la Cátedra, Extensión Agrícola y Sociología Rural de la Facultad de Agronomía en Montevideo, Uruguay, 1957-1958.
Publicaciones principales:	ANSORENA, I. Concepto de desarrollo rural. In Seminario Nacional de Desarrollo Rural para Funcionarios Gubernamentales del Sector Agrícola, Panamá, 1971. Memoria, Panamá, Ministerio de Agricultura y Granadería, Comisión de Reforma Agraria, Instituto de Fomento Económico e IICA, Dirección Regional para la Zona Norte, 1971, 10 p. ANSORENA, I. El problema educativo en la empresa asociative. Desarrollo Rural en las Américas (Costa Rica) 7(1): 32-56. 1975. _____. Las ciencias de la conducta en las profesiones agropecuarias. Desarrollo Rural en las Américas (Costa Rica) 8(1): 15-34. 1976. _____. La estensión agrícola como instrumento de desarrollo. Desarrollo Rural en las Américas (Colombia) 3(2): 26-34. _____. Marco social de la juventud rural campesina en países de América Latina. Seminario Nacional sobre Juventudes Rurales. Conocoto, Ecuador, 1976.

NOMBRE:	Finn Hyortmar Damtoft
NACIONALIDAD:	Canadiense
ESPECIALIDAD:	Biblioteconomía y Documentación
PAIS SEDE:	Costa Rica
CARGO ACTUAL:	Especialista en Información y Documentatión

Fecha de ingreso al IICA:	1°de mayo de 1975.
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_____. et. al. La educación, la investigación y la extensión Agrícola en el Perú, 1967.

_____. Fundamento de la participación popular en los planes y proyectos de desarrollo. In IICA. Organización campesina en América Latina. Publicación Miscelánea no. 63. 1969. pp 247-259.

_____. El papel del extensionista como promotor de cambio en desarrollo rural. In Seminario Internacional de Cooperación, Extensión y Desarrollo, Santo Domingo, Rep. Dominicana, 1974. Santo Domingo Secretaría de Estado de Agricultura, 1974. pp. 51.