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SHARING AGRICULTURAL DOCUMENTATION AND
INFORMATION RESOURCES IN GUYANA



INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE

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INFORMATION RESOURCES IN GUYANA

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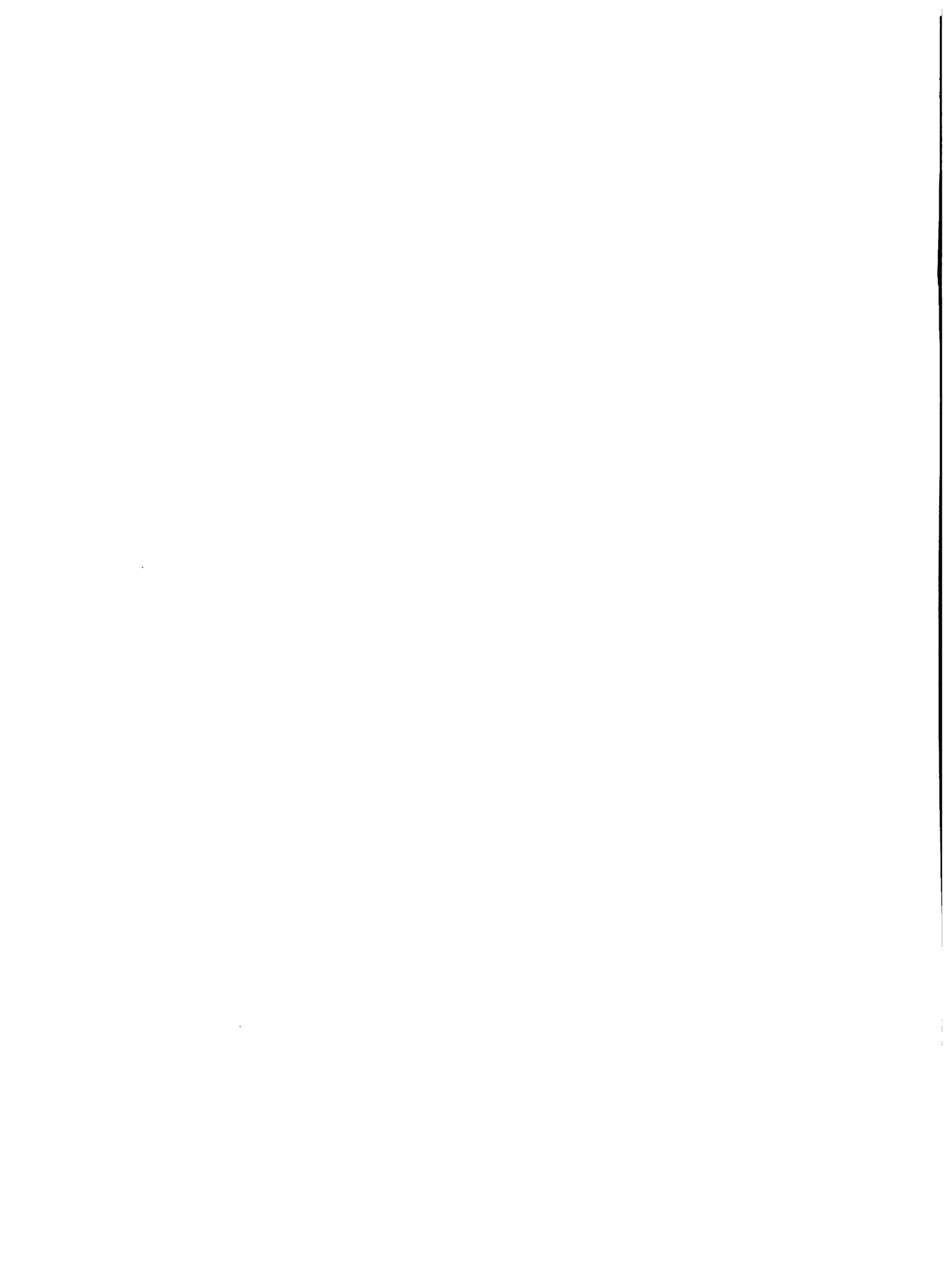
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A C K N O W L E D G E M E N T S

The Consultant is pleased to acknowledge the invaluable assistance of the Guyana University Library staff before and during the carrying out of the mission.

The Consultant is particularly grateful to Mrs. Yvonne V. Stephenson, Librarian of the University of Guyana, for her inestimable help and suggestions in the planning of the different stages of the mission as well as for the provision of the logistical support.

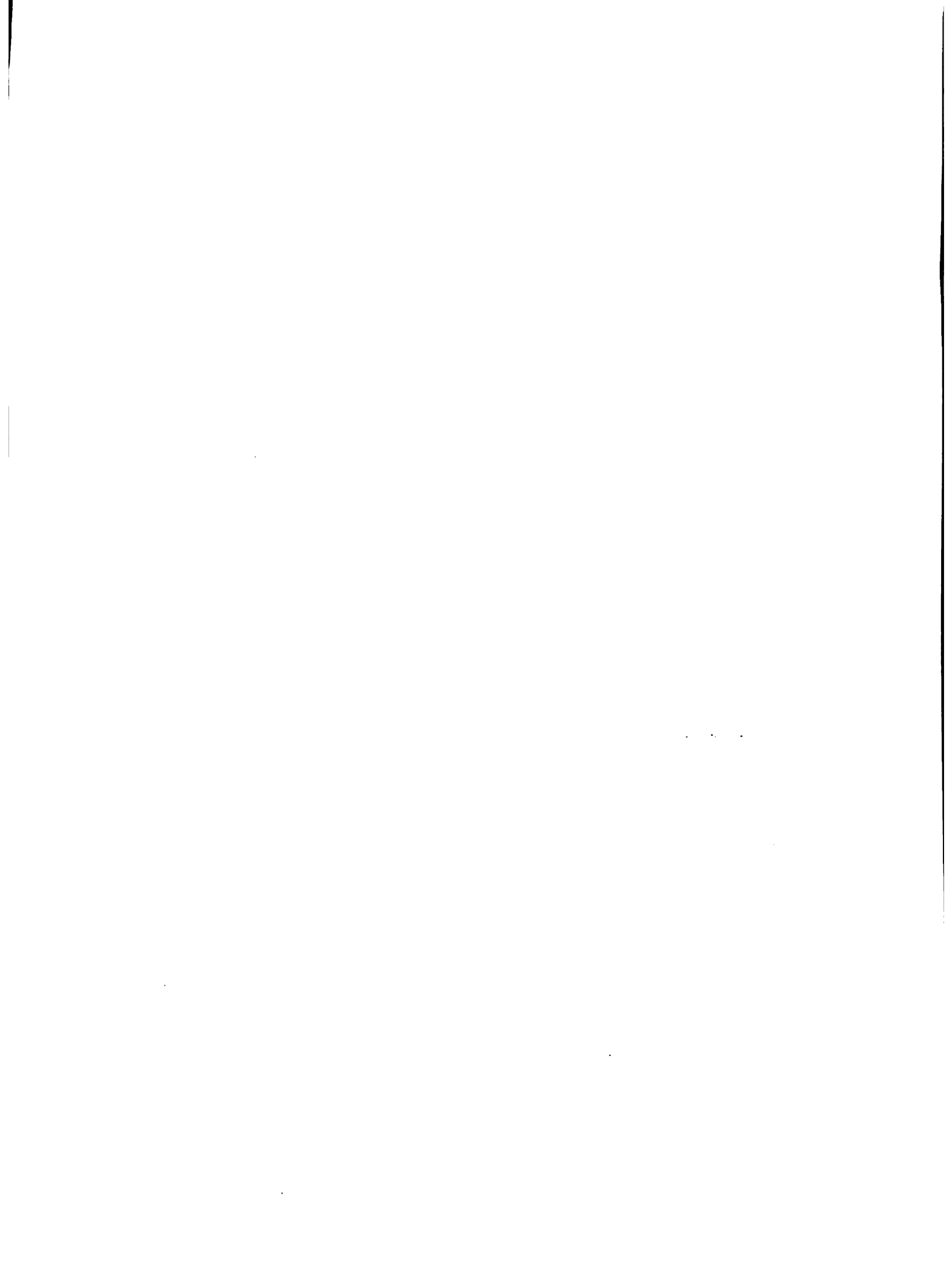
Thanks are due also to Mrs. Olive King, Deputy Librarian, for her assistance in co-ordinating the survey programme and proof-reading the report.

A note of appreciation to Miss Olive Sahai, Assistant Librarian, for her assistance in data/information collection.

The Consultant is indebted also to all the National authorities at administrative, planning and operational levels involved in the agricultural sector, who provided inputs to fulfil the objectives of the mission. A list of these persons is attached as Appendix 4.

The First Draft of this Proposal was presented in February, 1981.

O. Arboleda-Sepúlveda



INTRODUCTION

The UNESCO Consultant was given the tasks of recommending a programme for (1) the development of an Agricultural Information Network in Guyana and (2) the establishment of an Agricultural Documentation Centre, which provides for University students, academic staff, researchers, agricultural officers and practitioners, government officials, policy makers and planners, as well as all other groups of information users of the rural sector in the country.

METHODOLOGY

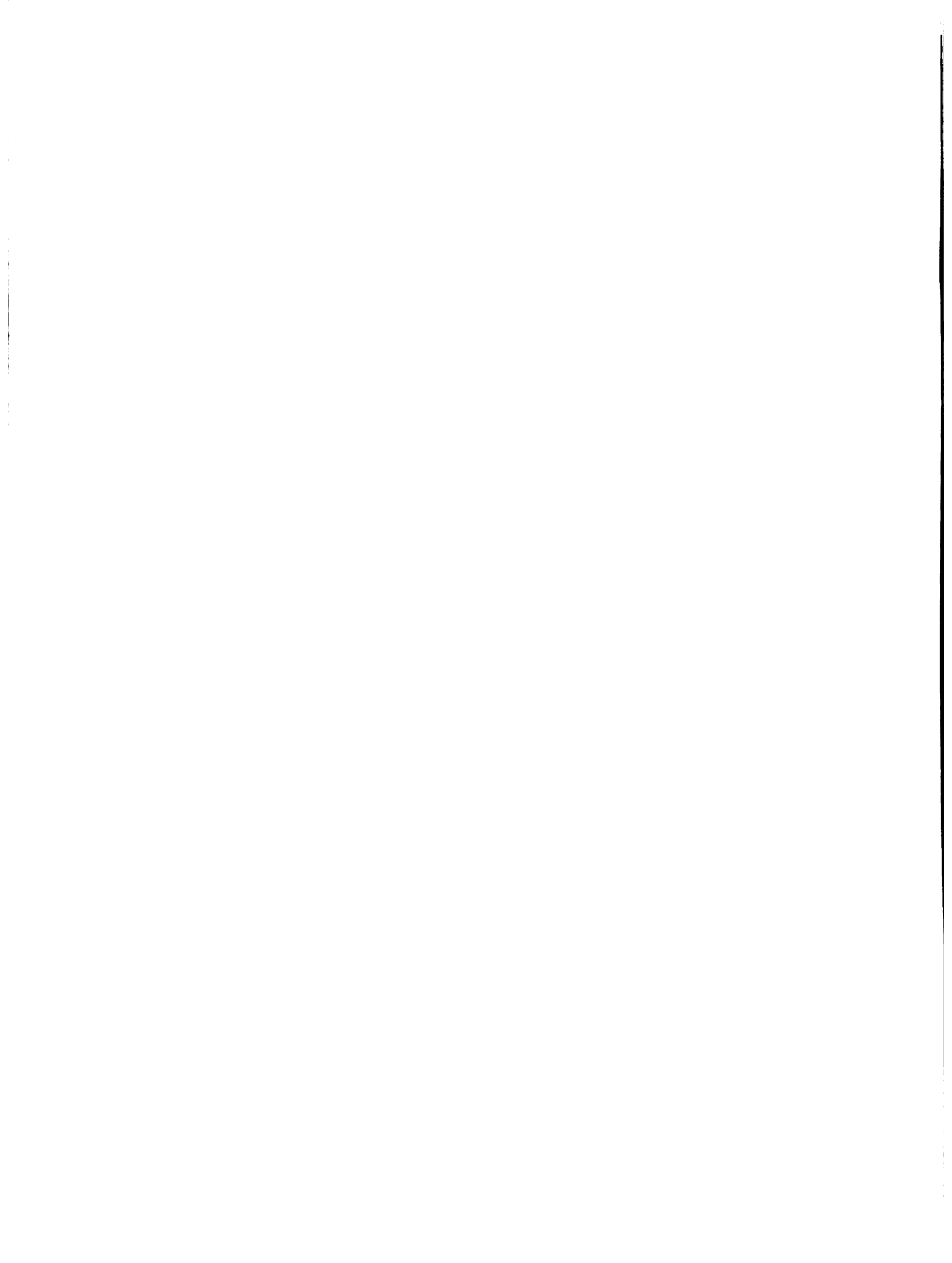
To achieve the foregoing tasks it was decided, as a first step, to conduct a survey to gather all significant data and information. The Consultant with the assistance of the University of Guyana Library staff, prepared a representative list of institutions involved in agriculture and related activities. This included approximately 35 individuals as sponsors, producers, intermediaries and users of documentation/information (Appendices 1, 4). To facilitate the task of gathering significant data and information a guide with the main topics covered by the survey was used by the interviewer (Appendix 2).

This first mission was devoted to making a proposal for the development of an agricultural information/documentation network in Guyana. The duration of the mission was 17 days - from January 26 to February 11, 1981. As an important input to the survey, a search for significant literature in the field of agricultural documentation was realized, and some 36 references were located. (see Bibliography).

REVIEW OF PAST ACTIVITIES

The authorities of Guyana pursued the creation of the National Science Research Council (NSRC) during the early 1970's, with a view to monitoring the science and technology sector, to ensure communication and compatibility, and to encourage relevant research. According to Act No. 26 of 1974, the NSRC functions were defined, among others, as follows:

- to assist in the formulation of, and to advise the government on a National Science Policy;

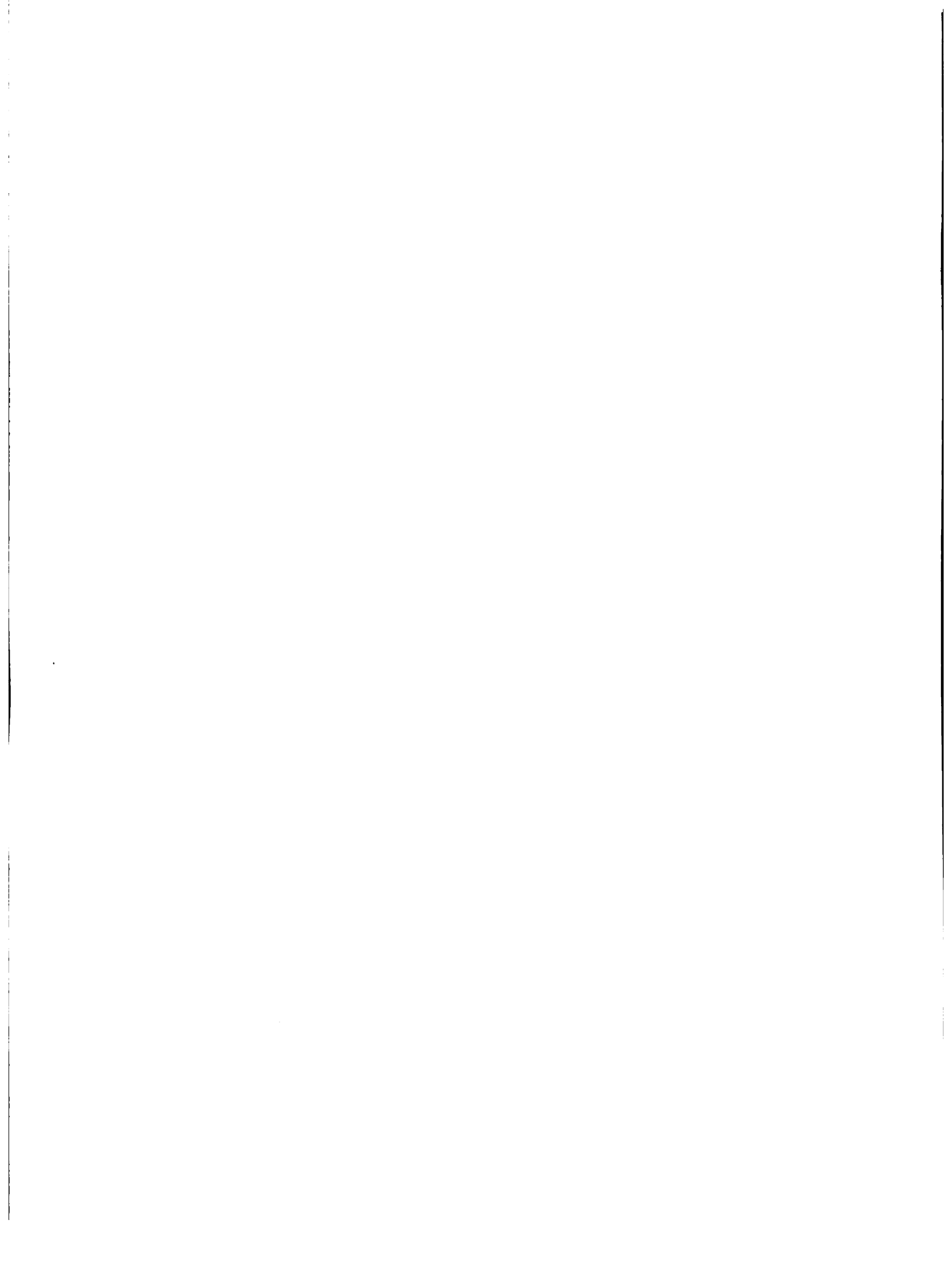


- to determine priorities for scientific and technological activities in Guyana;
- to promote research and to ensure the application of the results of scientific and technological activities to the development of agriculture, industry and social welfare in Guyana;
- to collect and disseminate information relating to scientific and technical matters, and to publish reports and papers and hold conferences on scientific and technical matters (20).

Early in 1976 the NSRC gave priority to the "Agricultural Information Storage and Retrieval Project". This project had as its broad objective, the acquisition of all documents pertaining to agricultural research in Guyana, and the storage of the information contained therein in such a way as to make it readily and quickly available to agricultural research workers. In 1978 the NSRC transferred this project to the University of Guyana Library in view of the fact that it had the necessary infrastructure to guarantee its continuity. The University Library then assigned to a professional Librarian the responsibility for the development of that collection in addition to the basic collection in agricultural fields already existing in the University Library. At the present time, the recently established Faculty of Agriculture requires the development of documentation resources for its own needs. This implies the integration of a developing specialized collection for lecturers and students of the Faculty with the existing resources in the University Library.

The Consultant had the opportunity in August 1976 of carrying out in Guyana a technical mission, within the IICA/IDRC Project, to observe the potentialities of the country to organize its own Agricultural documentation and information flow and to integrate it into the AGRIS/AGRINTER systems, as well as to identify the relevant aspects that should be reinforced (2).

In September 1980 a specific proposal was prepared to be submitted by the Ministry of Agriculture to the IDRC, Canada and IICA. The Project is oriented towards creating and maintaining a basic infrastructure in the Central Agricultural Research Station Library, so that it can participate in the information



transfer to the technicians of the Station, the Faculty of Agriculture and other users whose activities are related to research and development of the rural sector (28).

Since 1978 Guyana has been participating through the University Library in the Inter-American Agricultural Information System-AGRINTER/AGRIS. This participation has been through attendance at the 5th and 6th AGRINTER Round Tables, held in Costa Rica, April 1978 and Peru, April 1979, respectively.

In addition, the University Library has maintained links with the AGRIS/AGRINTER System, and continued to function as the National Centre for liaison with AGRIS. This liaison includes the responsibility for submission of locally produced material to the AGRINTER Data Base.

THE EXISTING SITUATION

National Information Policy(*)

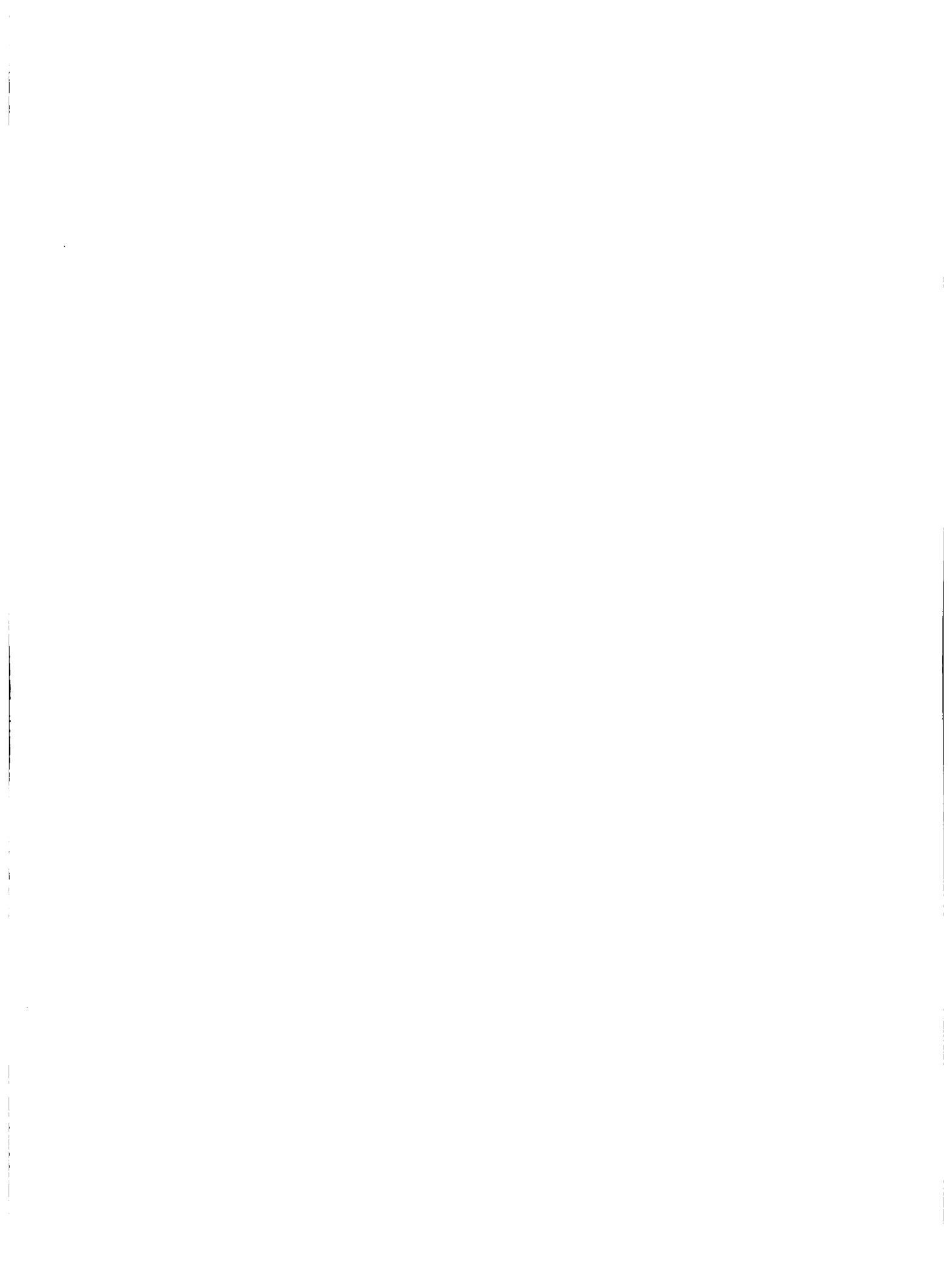
The task of formulating proposals for the sectoral development of an agricultural documentation/information network, or sharing activity, was done in the absence of an overall National Information Policy. This factor did not significantly hinder the formulation of the proposals, but care was taken to ensure that there was a built-in flexibility in the relevant areas of the proposal so as to allow for compatibility with the National Information Policy which is now under consideration.

It is noteworthy that during the actual period of undertaking this mission, the Government of Guyana, through its Minister of Information had completed arrangements for the inaugural meeting of the National Commission on Libraries, and related services, which body is charged with the responsibility for recommending to the Government a programme for the overall development of the country's information infrastructure. In a nutshell, the terms of reference of this Commission are as follows:

Steph... on, Yvonne. Personal Communication.



- a) To prepare a policy statement outlining the nation's intentions and objectives in regards to a national information system.
- b) To prepare a detailed and specific plan for the structuring of a national (information system which should be integrated into the national development) plan, paying particular attention to the following:
 - i. The identification of subsectors within the system, e.g. Science and Technology, Education, Law, etc. and the proposal of coordinating centres for each subsector.
 - ii. The identification of areas of rationalization and cooperation between libraries, documentation centres and archives within the above subsectors. Particular attention should be paid to the production of union catalogues of monographs and serials.
 - iii. The plan should specify the type, level and number of personnel needed to operate the proposed national information system, bearing in mind existing resources. The Commission should also examine training needs and conditions of service, and make recommendations.
 - iv. The need for legislation to accommodate the implementation or operation of a national information system.
 - v. The need for and specification of standards in respect of library buildings and equipment. Staffing and procedures, to encourage compatibility and possible integration or amalgamation.
 - vi. The need for the adoption of appropriate information technology, paying particular regard to cost effectiveness.
 - vii. A more effective bibliographic control of the national information output. (The national Bibliography produced by the National Library is a good foundation but is not currently able to capture all national publications. Public education and enforcement of legal deposit legislation would assist in this area).
 - viii. The linking of the national system with international information systems such as AGRIS (Agricultural Information System), MEDLARS (Medical Technical Information Services), etc., which monitor world literature in specialist fields.



- ix. The preparation of financial estimates for the implementation and operation of the national information system, distinguishing between locally incurred costs and foreign exchange requirements.

Agricultural Research:

The main producer of agricultural literature in the country, whose economy is heavily dependent on agriculture, is the government. This is easily explained because the agricultural research is borne fully by the state. The research done in Guyana is of a practical nature and geared to provide immediate material support to the productive sector. The future of agricultural research in Guyana is pivotal on the formulation of a national science policy of which agricultural research will be an integral part. This task is being handled by the National Science Research Council, a statutory body on which the relevant disciplines and experts, competent to handle such a responsibility are well represented (11).

In addition to the Divisions of the Ministry of Agriculture shown in Figure 1, the structure of the Agricultural System in the country can be summarized as follows:

Ministry of Agriculture:

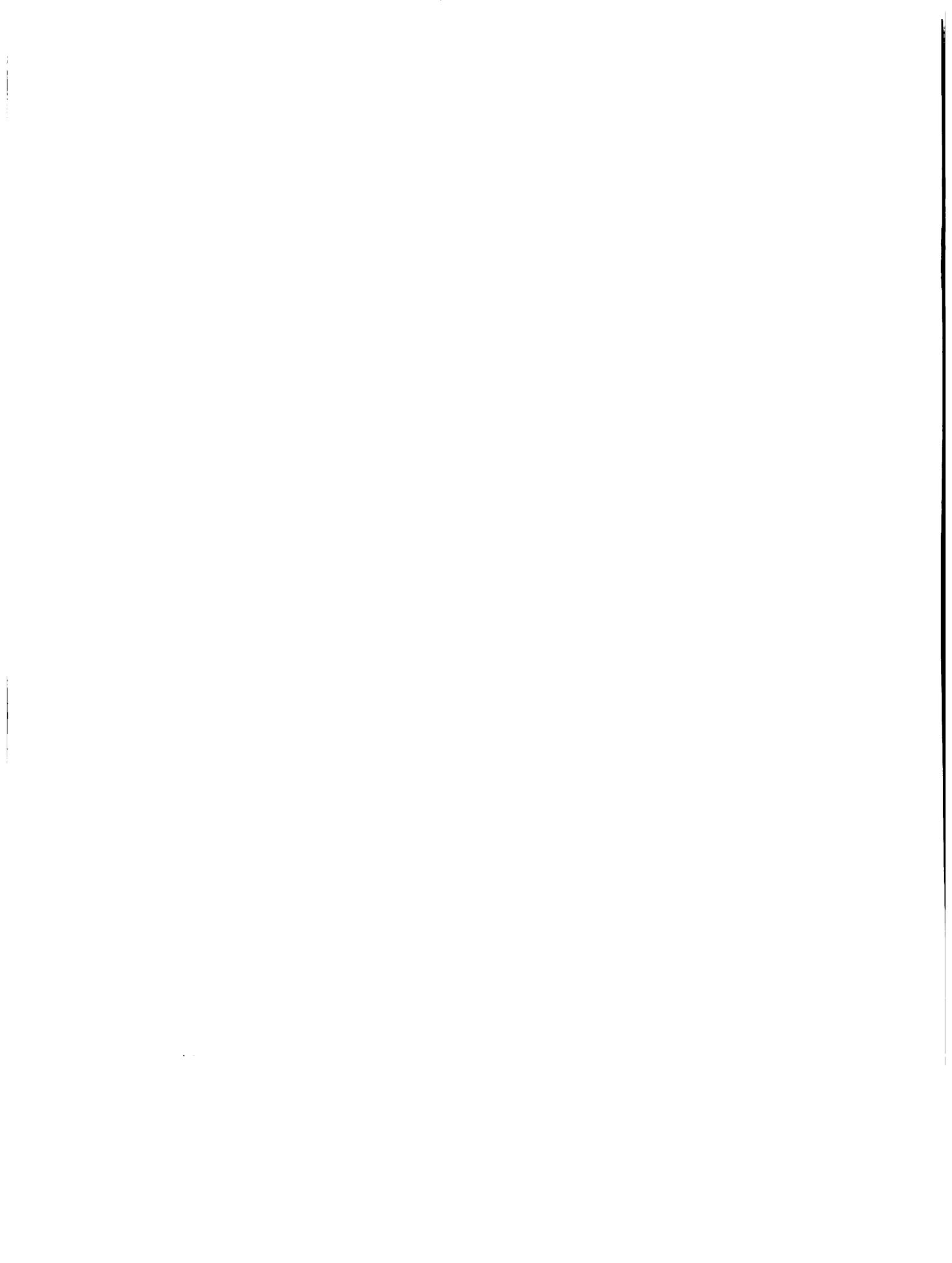
Areas of Research: Crops and Soil Sciences (excluding sugar and rice), Livestock Sciences(excluding beef and dairy), Fisheries.

The Guyana Rice Board:

Area of Responsibility: Rice research. This research sub-system is part of a fully integrated unit responsible for production, processing and marketing of the country's total rice production.

The Guyana Sugar Corporation: (GUYSUCO)

Area of Responsibility: Sugar research, which is geared towards the improvement of production and productivity. Some areas such as agro-industry and diversification into other products are being studied e.g. oil palm, cowpeas, onions, corn, cassava, etc.



The Livestock Development Company:

Area of Responsibility: Beef and Dairy Industries, pasture management and improvement, mixed swards and supplemental feeding.

The Hydro-Meteorological Unit, Ministry of Works:

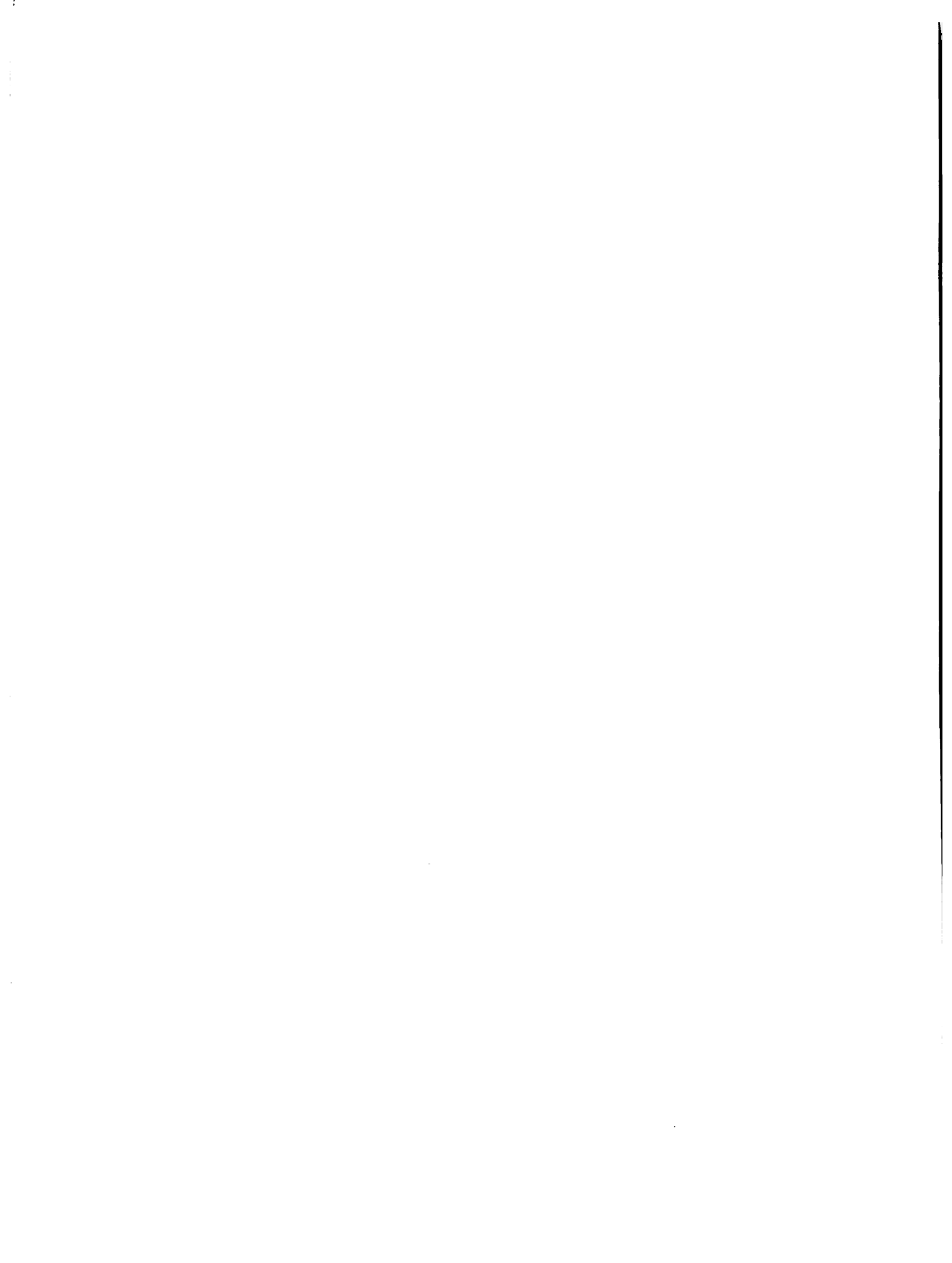
Some areas of research: Agro-meteorology and the effects of water on the growth of selected crops.

The University of Guyana:

Some areas of research: Biological Sciences, primarily as post-graduate research projects in the fields of entomology, plant pathology and plant physiology. This has been done mainly by the Faculty of Natural Sciences. The newly established Faculty of Agriculture will be involved in agricultural research in the near future.

Production of Agricultural Documents:

In addition to the results of the interviews with the sponsors, producers and users of agricultural documentation, an analysis of the "Bibliography of Agricultural Research in Guyana" (22) was made, in order to complement the findings of the survey. In this respect it has to be recognized that important efforts have been made to locate and prepare special bibliographies in the field of agriculture and related topics (8, 10, 14, 16, 17, 22). But these have been isolated efforts, far removed from a systematic mechanism for recording the information produced. So far, the main efforts have been applied to compile retrospective bibliographies, but no effort whatsoever has been made to establish a mechanism to control the current and future flow of information in the field of agriculture. In the case of Guyana, it is not a new fact that for the most part, the documents are of the non-conventional, difficult-to-get type of material. Some colleagues such as Benjamin, Collins, King, Knee (3,9, 18, 20) recently experimented and revealed how difficult it is to locate and have access to this type of "invisible" material, because it is produced in a very limited quantity, not properly distributed through regular or commercial channels. Its existence is known to a few who keep them in their own offices or homes and when known is largely inaccessible. To illustrate this



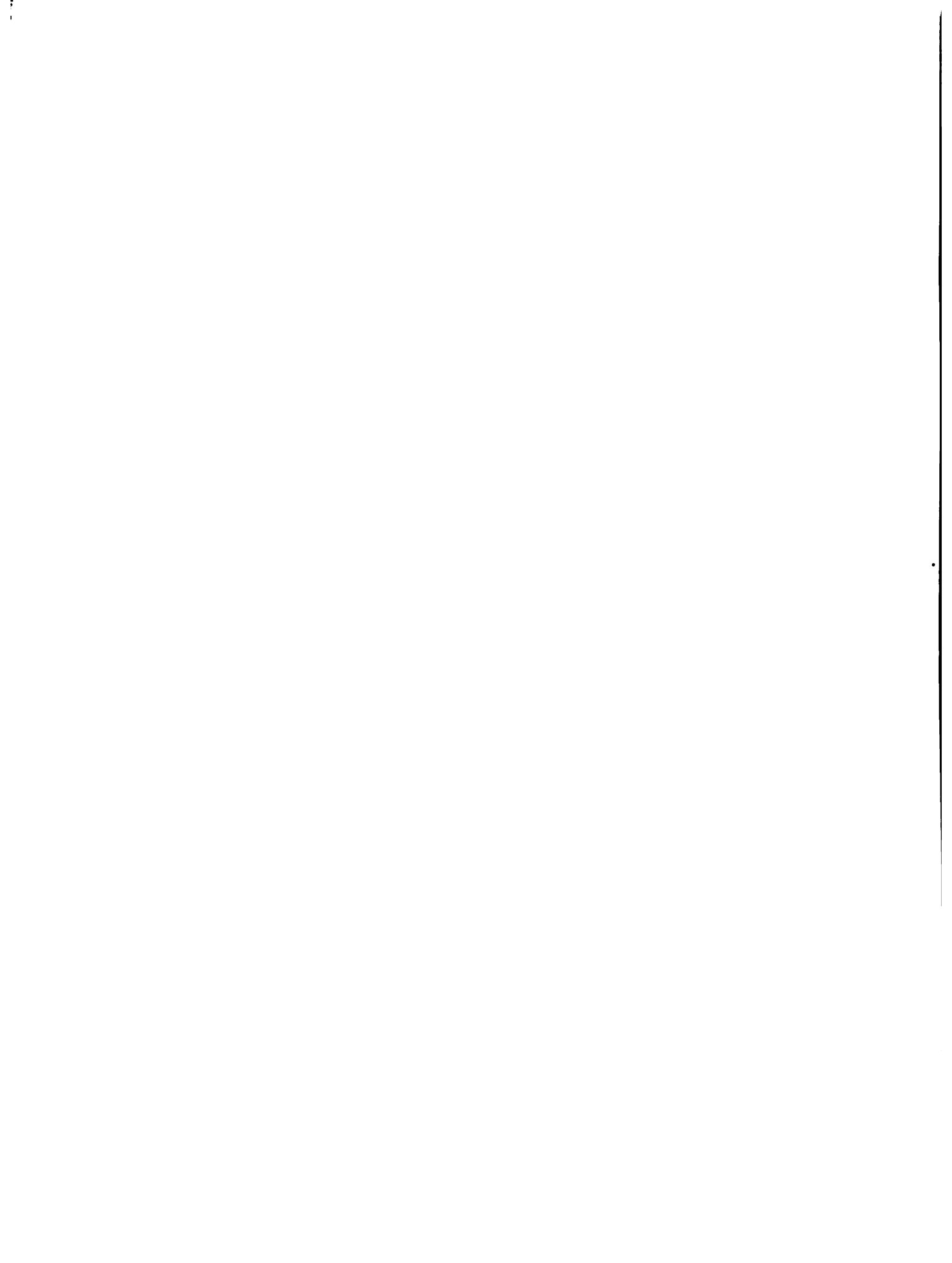
problem, the NSRC-Agricultural Information Project (19, 20) took almost two years to compile 1059 bibliographic references of agricultural research literature in Guyana (1920-1977). Only 28 percent could have been located through standard abstracting and indexing services, because they were published in well known National and International Journals and some were proceedings of International meetings. The remaining 72% belongs to the type of non-conventional, difficult-to-get material already described. In spite of the efforts and resources invested in this NSRC project, some interviewers considered that this compilation is far from complete. Analysing the 57 years covered by the NSRC Agricultural Bibliography, it shows the following data:

- 300 bibliographic references out of 1059 (28%) were published outside of Guyana.
- at the present time, the national agricultural or agriculturally related journals are suspended.
 - Agricultural Research, Guyana 1967 - Latest issue 1976
 - Farm Journal of Guyana 1936 - Latest issue 1968
 - Guyana Journal of Science 1972 - Latest issue 1977
 - Timehri 1882 - Latest issue 1975

Figure 2 shows the production performance of the Guyanese agricultural literature . It is necessary to note that these data do not include forest sciences. The figure is the result of the analysis of 591 references produced during the last 15 years covered by the NSRC bibliography. The average production during this period was 39.4 references per year. The figure shows also the fluctuations in production due, probably, to emphasis of official policy in certain lines of research in some years or to the result of bilateral or international research projects. Assuming that this NSRC Bibliography registers only 50 percent of the actual literature produced, it is clear that an average of 80 references per year is not very high and should not be difficult to control within the frame of a national agricultural information network.

TABLE 1 shows the emphasis of the literature recorded on special subjects such as:

Soil Science.	22%
Economic development/Rural Sociology	17%
Protection of plants and stored products	11.3%



1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977

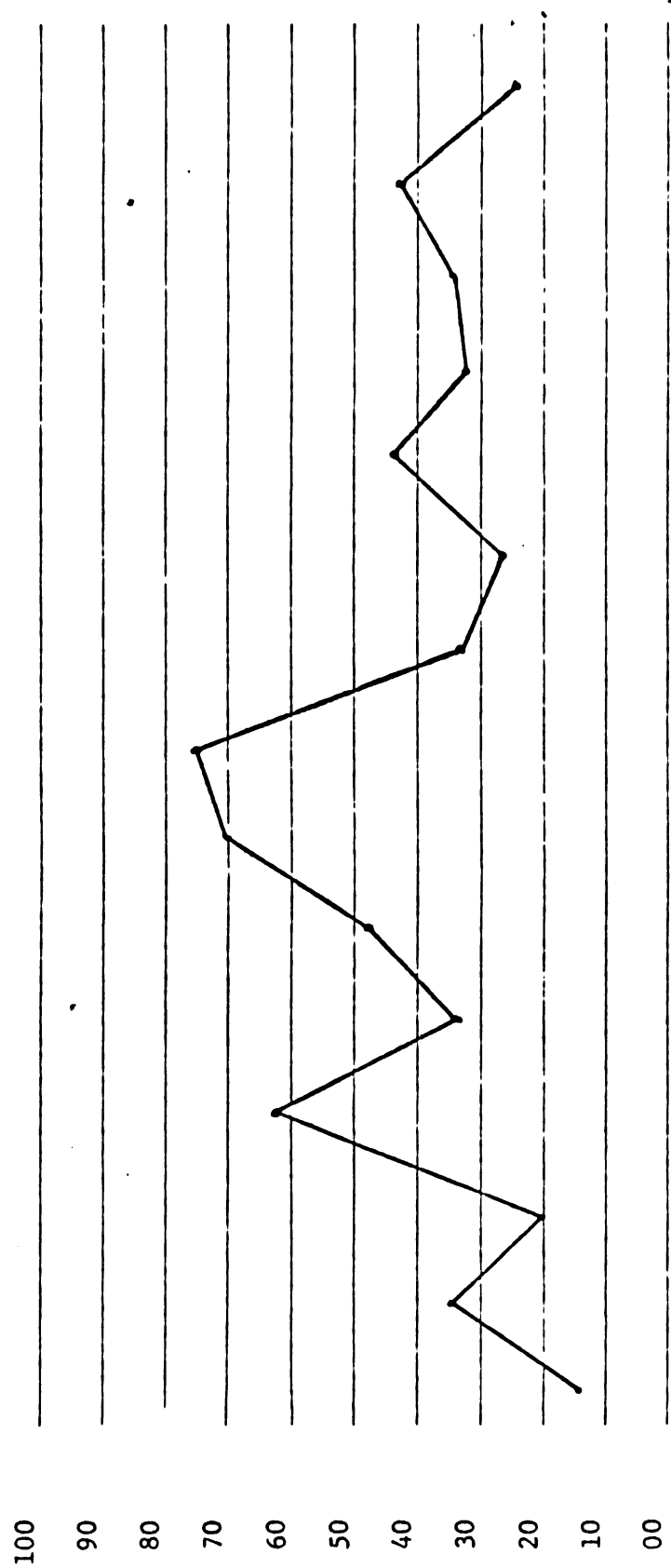


FIG. 2 PERFORMANCE OF THE PRODUCTION OF AGRICULTURAL RESEARCH LITERATURE IN GUYANA.

Plant production	9.6%
Animal production	8.3%
Plant Ecology	7.2%

In addition, Table 1 points out subjects that are poorly covered or non-existent such as:

- Pollution
- Human Nutrition
- Geography and History
- Administration and Legislation
- Plant Breeding
- Plant Physiology
- Aquatic Sciences and Fisheries

Not shown in Table 1 are subjects that are particularly poorly covered such as:

- Animal Breeding
- Veterinary Medicine
- Agricultural Education

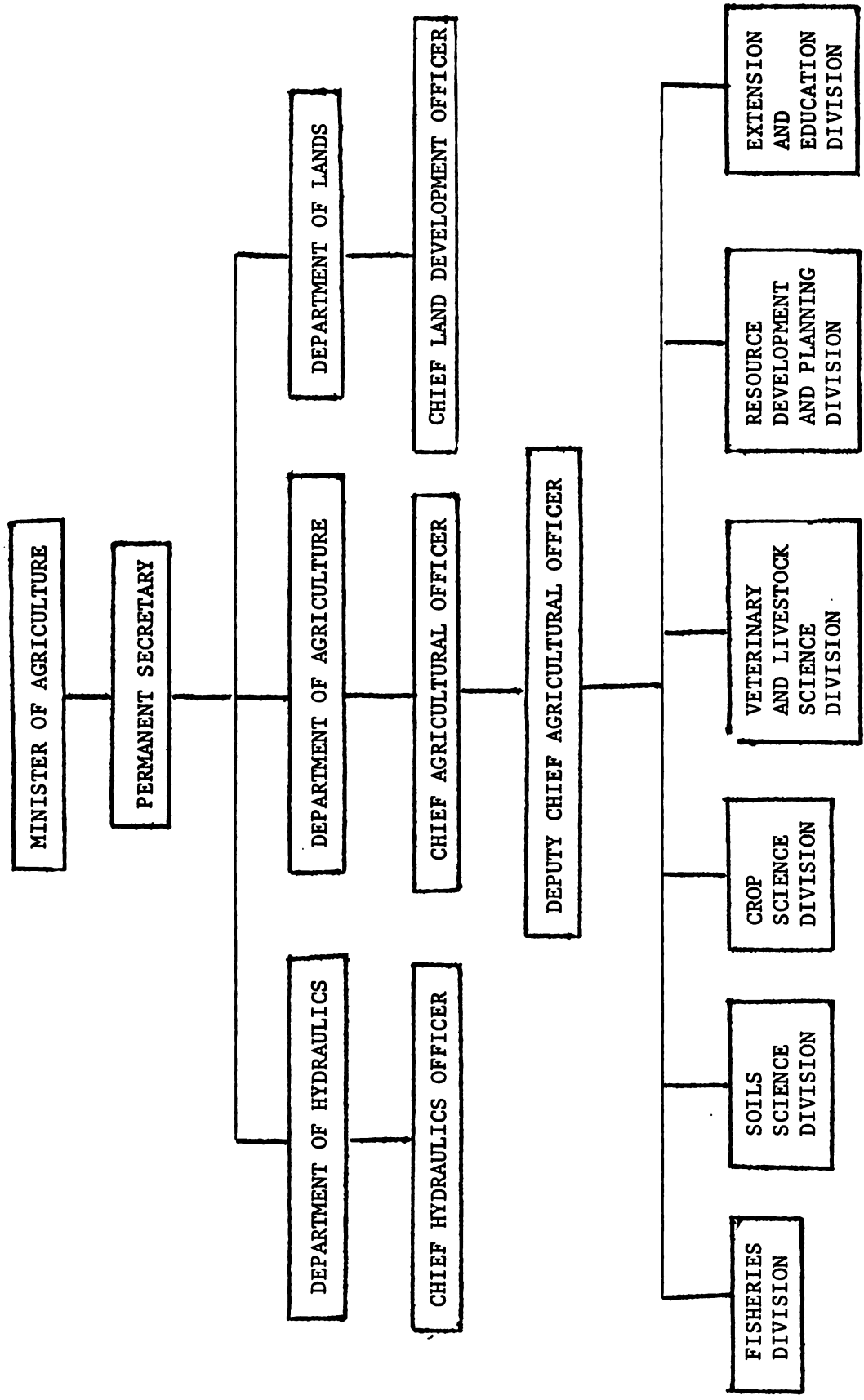
TABLE 2 intends to show the production indexes as well as the existing gaps with regards to the literature on commodities as follows:

Sugar and starch crops	18.9%
Cereals	14.4%
Domesticated Mammals	8.1%
Oil Crops	5.9%

Among the poorly covered commodities are:

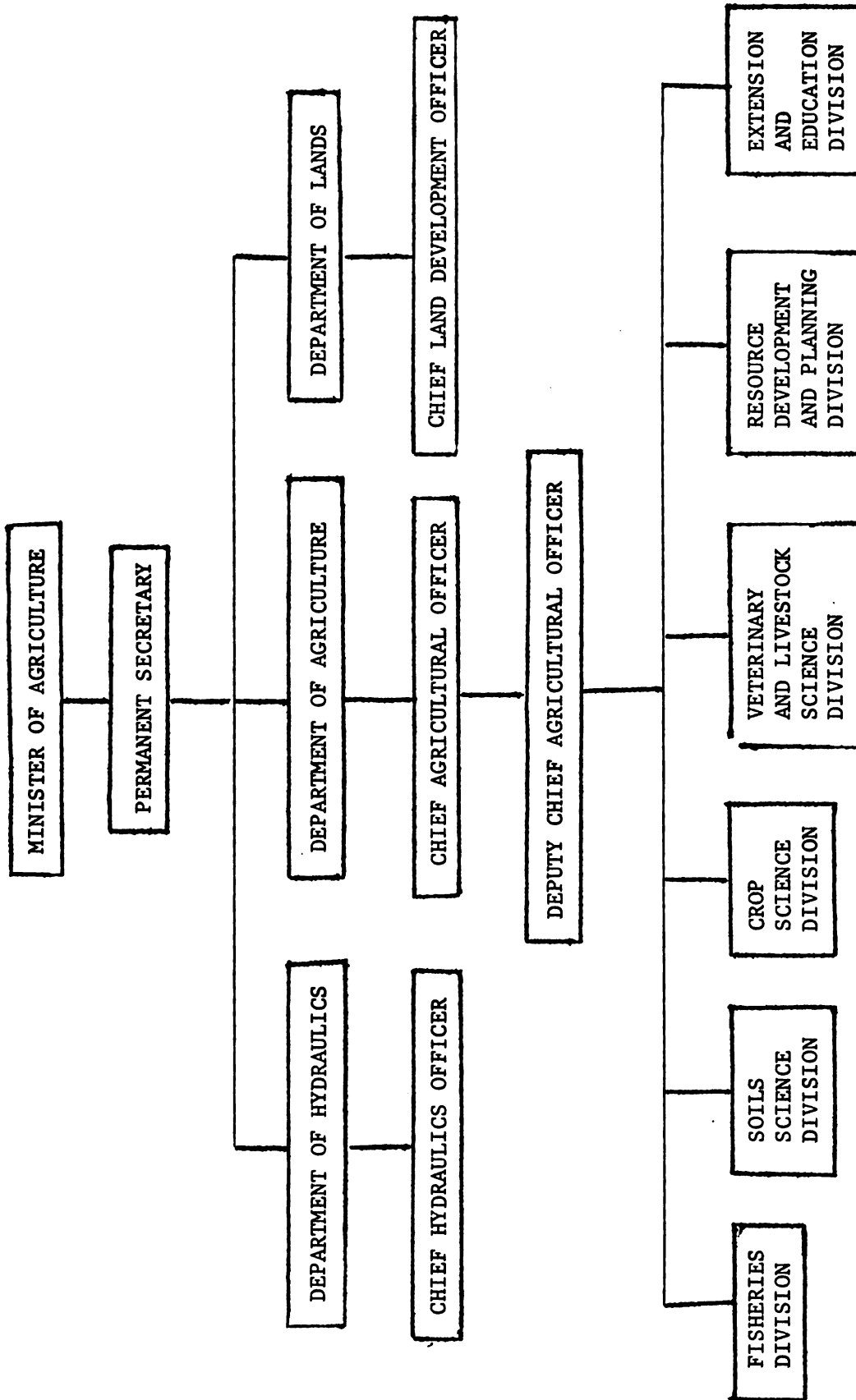
- Temperate berry fruits
- Green and leafy vegetables
- Cover crops
- Bulbous vegetables
- Drug plants
- Domesticated birds
- Insects

FIGURE 1: The Organizational Chart of the Department of Agriculture
(in relation to other departments in the Ministry)



NB: This Agency has recently been reorganized but the new organogram is not yet available.

FIGURE 1: The Organizational Chart of the Department of Agriculture
(in relation to other departments in the Ministry)



NB: This Agency has recently been reorganized but the new organogram is not yet available.

TABLE 1: DISTRIBUTION OF THE LITERATURE BY SUBJECTS
(AGRIS Categories)

	<u>References</u>	<u>%</u>
A00 Agriculture - General	43	4.06
B00 Geography and History	6	0.56
C00 Education, Extension, Advisory Work	16	1.51
D00 Administration and Legislation	15	1.41
E00 Economics, Development and Rural Sociology	180	16.99
F00 Plant Production - General	102	9.63
F20 Soil Science	231	21.81
F30 Plant Breeding	14	1.32
F40 Plant Ecology	76	7.17
F60 Plant Physiology and Biochemistry	16	1.51
H00 Protection of Plants and Stored Products	120	11.33
L00 Animal Production	88	8.30
M00 Aquatic Sciences and Fisheries	19	1.79
N00 Machinery and Buildings	33	3.11
P00 Natural Resources	46	4.34
Q00 Food Science	37	3.49
S00 Human Nutrition	5	0.47
T00 Pollution	1	0.09
W00 Auxiliary Disciplines	11	1.03
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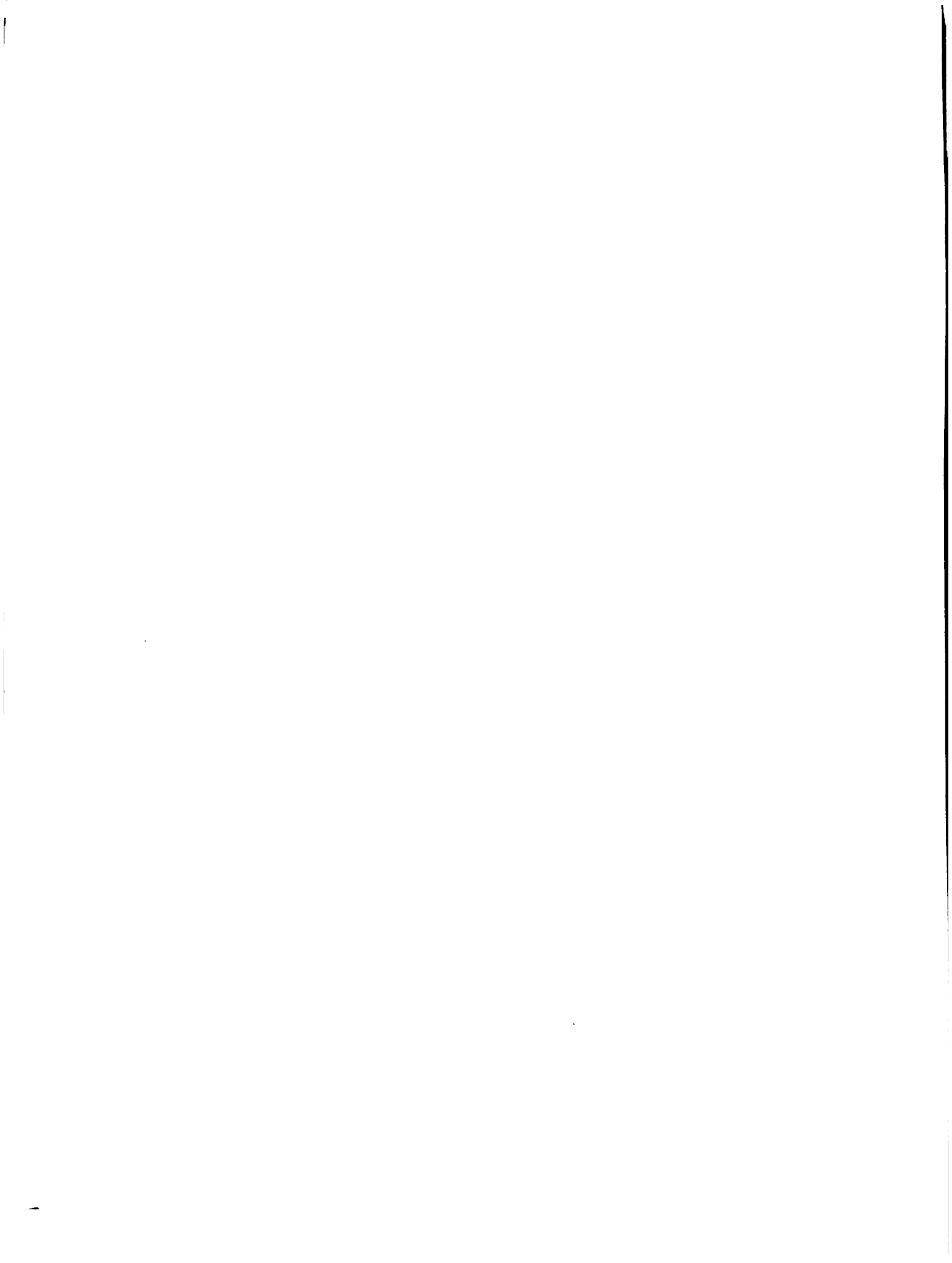


TABLE 2: DISTRIBUTION OF THE LITERATURE BY COMMODITIES
(AGRIS Codes)

	<u>References</u>	<u>%</u>
0100 Cereals	152	14.35
0200 Sugar and Starch Crops	200	18.88
0300 Oil Crops	62	5.85
0400 Fibre Plants	18	1.69
0900 Temperate Berries	1	0.09
1000 Citrus Fruits	8	0.75
1100 Tropical Fruits	12	1.13
1300 Vegetables	8	0.75
1400 Leguminous Grains and Vegetables	11	1.04
1500 Root Vegetables	17	1.60
1600 Green and Leafy Vegetables	1	0.09
1700 Bulbous Vegetables	6	0.56
1900 Pastures and Feed Crops	23	2.17
2000 Cover Crops	1	0.09
2100 Stimulant Crops	9	0.85
2700 Drug Plants	4	0.38
5000 Domesticated Mammals	86	8.12
6000 Domesticated Birds	7	0.66
7000 Insects	7	0.66
8000 Aquatic Animals	8	0.75
9000 Foods	27	2.54
Others	391	36.92
	<hr/>	<hr/>
	1059	100.00



One of the most common complaints during the survey was the lack of institutional policies to publish, as well as the absence of any kind of incentives to put into printed form, the results of experimentation and research. In addition to this negative situation, another problem arose for some institutions interested in doing research or experimentation, trying to diversify their lines of production, or initiate a specific project. For them it is very difficult to do that type of activity because they "just do not know what has been done in the country". A complement to this problematic area is that they do not rely on the collections of their own institutions. Therefore, they prefer to do their own bibliographic research and subscribe directly to the journals and abstracting services of their interest.

A tentative list of potential agricultural information producers in Guyana is presented in Appendix 1.

Documentary Resources:

The main findings of the survey in this respect can be deduced from Table 3 as follows:

- There is not a very old tradition in establishing and using agricultural libraries. The oldest one is approximately 25 years old; the others have had a very short period of active service.
- With the exception of two or three, the libraries are in a low stage of development and the majority of collections are not up-to-date.
- The budget, in general terms, is inadequate for the needs of a research library. In addition, there are some problems regarding transactions in foreign currency.
- There is unnecessary duplication of journal titles, especially in the "working collections". These are, for the time being, justified owing to the lack of communication between institutions and the absence of mechanisms for coordinated acquisitions at the national level.

TABLE 3: STATISTICAL SUMMARY OF SURVEY DATA (DOCUMENTARY RESOURCES)

Documentation Unit Code	Starting Date	HOLDINGS				Classification Scheme	SPECIALIZED SERVICES			MANPOWER		CO-OPERATIVE DOCUMENTATION PROJECTS		USERS**	
		Book Vols.	Current Periodicals	Indexing Services			A.Photo copying B.Alerting C.Short Bibliographies	Prof. Library Staff	Non-prof. Level	National Level	Inter-national Level	ST.	RS	LC.	
01	1970	6,000	50	5	UDC	A B C	2	3	ULS	CRB	-	150	-	-	
02	-	3,700	22	3	Oxford	-	-	1	FB	-	-	25	-	-	
03	1954	14,000	78	7	USGS	-	-	3	ULS	-	-	30	-	-	
04	1966	2,500	20	-	Dewey	A -	-	2	-	-	200	-	16	14.	
05	1976	800	15	2	-	A -	-	1	-	AGRT.	-	30	-	-	
06	1973	3,000	70	-	UDC	-	-	1	-	-	62	-	88	-	
07	-	500	51	10	-	-	-	1	-	-	-	23	-	-	
08	-	500	26	7	-	-	-	-	ULS	-	-	30	-	-	
09	-	3,000	100	35	-	-	-	1	ULS	-	-	300	-	-	
10	-	2,000	50	2	UDC	-	-	3	-	-	-	80	-	-	
11	1980	600	60	2	UDC	- B -	1	1	ULS	-	-	50	-	-	
12	1963	110,000	120*	25*	LC	A - C	13	52	ULS	AGRT CRB	100*	-	21*	-	
						4 2 2					362	718	125		

* Agriculture Only
 AGRT - AGRINTER/AGRIS
 CRB - Caribbean Regional Bibliography
 FB - Forestry Bibliography
 ULS - Union List of Serials

**
 ST - Students
 RS - Researchers
 LC - Lecturers

- A Research Library ought to have a minimum of printed abstracting and indexing services, and make them available to the users. This is justified by extensive use by both agricultural specialists and librarians of the facilities. But it has been noted that a great number of users do not know how to use these tools which, by the way, are very expensive.
- In the case of technical processing of documents, it has been noted that either some collections are not classified or a diversity of classification schemes are used. This is not a real problem now, but could cause in the future, some problems of co-ordination, production and utilization of centralized catalogues or union lists.
- Table 4 shows that the present libraries put excessive emphasis on the input and very limited resources, time and effort in the output. Very few offer photocopying services, less in alerting services and bibliographies and almost none in Selective Dissemination of Information - (SDI)
- Only two or three libraries have a reasonable number of both professional and auxiliary staff. There are many reasons for this situation, among the more tangible being that library work image is low in comparison to other careers; there is no library school in the country; salaries, promotional prospects, and general working conditions are not very attractive, and there is no clear definition of library positions and designations.
- The problems derived from libraries working in isolation are countless. That is why the involvement of the Guyana Library Association is invaluable in elaborating cooperative tools such as the "Guide to library services in Guyana" and the "Union list of serials in Science and Technology".
- The users registered by the libraries surveyed show a low amount of really active users. This is probably due to the fact that the services offered are considered few and poor; potential users are not familiar with the libraries, or they do not rely on the present library system. An intensive work of promotion, motivation and orientation is necessary to convert the potential to active information users.

- As shown in Table 4, a significant number of units surveyed are not really libraries as such, but "Working collections" either of individuals or official Divisions or Units that are not interested or do not have sufficient resources to maintain an organized library, or to hire a professional librarian.

PROPOSAL FOR ESTABLISHING AN AGRICULTURAL INFORMATION NETWORK

Justification and Definition:

The existing situation described in the foregoing chapter of this report may gear the national authorities at high level of decision making, as well as the operational level, to make the provisions necessary to establish a National Agricultural Documentation/Information Network, with the summary of benefits as shown in Table 5.

What is a Network of Agricultural Documentation/Information for Guyana?

A network is a National System of coordinated information units and resources available in the country, with the capability of channelling relevant information to specific categories of users to meet their specific needs and to support their demands.

The Network deals with any type of information, printed or not, including books, journals, articles, reports (published and unpublished), theses, audiovisuals, facts, figures, statistics, specialists' brains, etc.

A network is not necessarily an enormous, sophisticated documentation centre to solve all the queries of the national users. It is not a chain of costly and complicated computer facilities dispersed in the country. A certain degree of automation is needed at a determined stage of development, but computers are not indispensable in the definition of a national information network.

How a National agricultural information network operates in the context of a National information system.

There is no unique mode of operation capable of being adopted by all countries. By the same token, it is not always necessary to wait until the

STATISTICAL SUMMARY OF SURVEY DATA
 TABLE 4. AGRICULTURAL AND RELATED INSTITUTIONS

Type of Institution	Documentation Units	
	Library	Working Collection
Education	3	-
Agro-Industry	1	-
Museum	-	1
Research Institutes	-	4
Ministry Departments	4	2
Technical Cooperation		
- Government	1	-
- Regional Organization	-	1
Commerce and Marketing		
- Government	-	1
- Regional Organization	1	-

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TABLE 5: WHY AN AGRICULTURAL INFORMATION/DOCUMENTATION NETWORK IN GUYANA?

BENEFITS	NETWORK				
	USERS	RESEARCH TEACHING EXTENSION	POLICYMAKERS, PLANNERS, AUTHORITIES	LIBRARIANS DOCUMENTALISTS	THE COUNTRY
1. Easy and rapid access to the appropriate bit of information at the precise moment	*	*	*	*	*
2. Control of information flow is systematized in the different phases of generation, procurement, processing, storage and dissemination	*	*	*	*	*
3. Specific users will be defined and appropriate services designed to meet specific needs for information	*				
4. Information/documentation services will keep users up-to-date instead of the users having to waste time searching for information in an unorganized flow of documents	*	*	*	*	*
5. Money will be saved or better utilized by involving producers of information in an information network approach	*		*	*	
6. System tools (union lists, guides, directories, manuals, etc.) will be prepared to facilitate the location and access to documentation resources inside or outside the country.	*			*	
7. Sharing of documentation resources avoids duplication of efforts in the processing, storage and use of information	*	*	*	*	
8. Information resources will not be limited to just printed material but will cover nonprint, audiovisual facts and data, statistics and new ideas and knowledge of scholars and experts	*	*	*	*	
9. Guyanese agricultural information will be merged with that of the region and the rest of the world, through international systems such as AGRINDEX, AGRIS and other specialized information systems. In this way magnetic tapes and by-products will be easily accessible and utilized	*	*			*
10. Standardized methodology and procedures for handling and dissemination of information will be applied	*			*	
11. Quality of research methodology will be improved and time of research projects be reduced	*	*	*	*	*
12. Research previously done or costly repetition of research in progress in the country or in the region will be avoided	*	*	*	*	*
13. The necessary number of libraries well organized in the country will be maintained and working AS a team in a cooperative way	*		*		*
14. Proliferation of isolated individual or institutional "working collections" will be discontinued	*	*	*	*	*
15. Computer facilities and equipment existing in the country will be efficiently utilized by the network.....	*		*		*
16. Efficient utilization of quality documentation/information resources within or outside the country will be made	*	*	*	*	*
17. Appropriate training/orientation will be provided to both users and intermediaries of documentation/information resources	*			*	

RURAL SECTOR OF GUYANA in general as well as coming generations will benefit from the information network.

coordinating body, the National information system, is formally operating to establish the sectoral information networks.

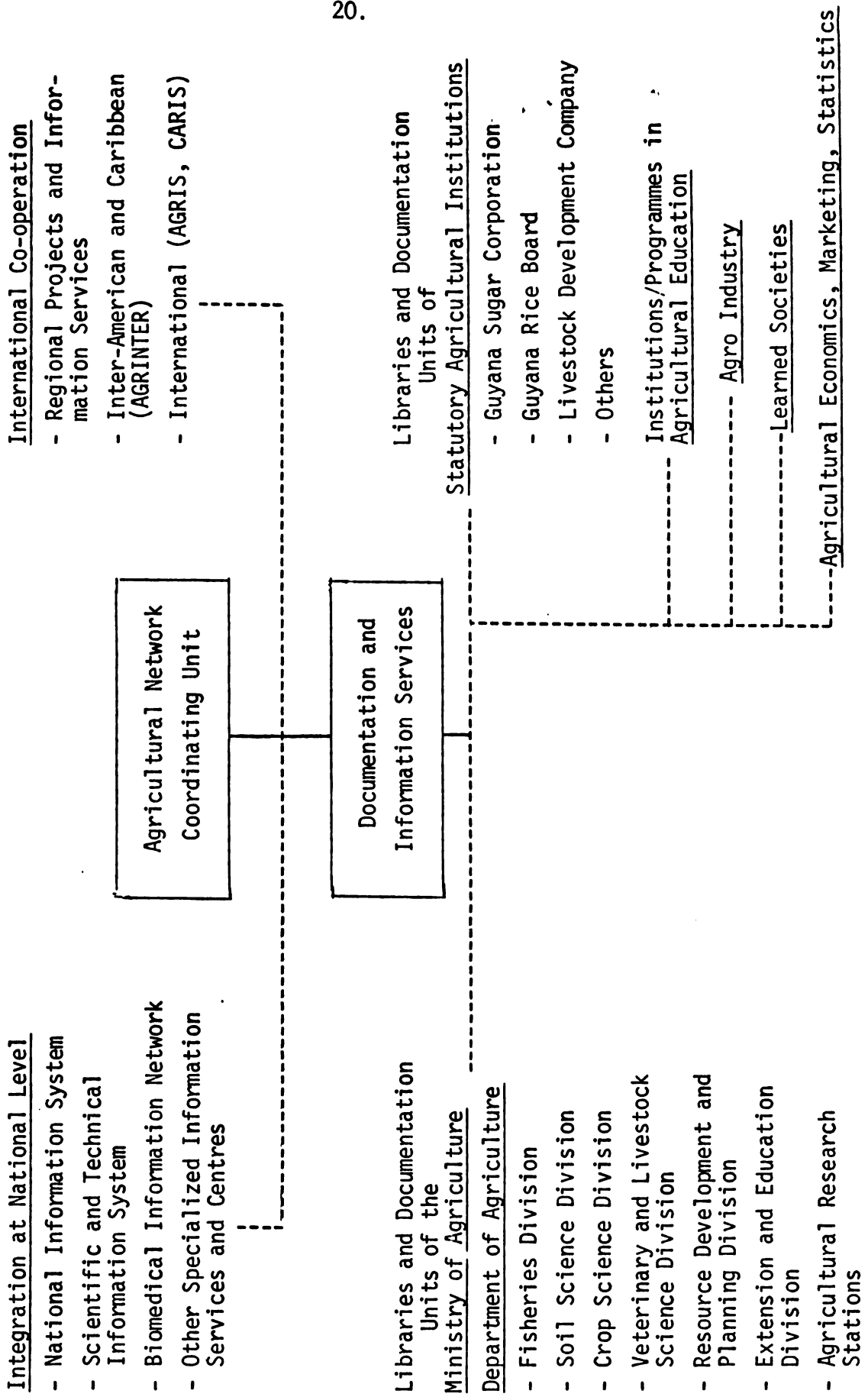
The general scheme in Figure 3 serves to illustrate how the agricultural sectoral network should fit into the national information system, and how it is connected with regional and international information systems (1,2,6,9, 12,20,25,26,28,34). Figure 3 also shows in dotted lines how the coordinating unit is functionally linked through documentation units of national institutions involved in agricultural activities. This is a relation of operation and coordination and not one of dependence.

The network proposed should be formed by a number of libraries and documentation units as a result of their common requirements for offering services to a specialized constituency and giving access to documentation resources concentrating on agriculture and related fields (natural resources, forestry, livestock, veterinary sciences, rural sociology, agricultural economics, etc.). (See list of libraries surveyed in Appendix 3).

Participation and cooperation is based on contractual agreements among the institutions which call for commitments from each participant to the network as a whole. The following are some of the commitments:

- to make its documentary resources available to users served by other libraries in the network.
- to pay, on a proportionate basis, for the establishment and maintenance of systems tools, such as: Union lists of serials, union catalogue of books, authority lists of institutions, guides, directories, etc. The costs-sharing basis could be in cash or in kind.
- To contribute to the rational development of a "common collection" with particular emphasis on agriculture and related fields of interest for the rural sector.
- to participate actively in training and orientation programmes for both users and librarians.

FIG. 3. NATIONAL AGRICULTURAL INFORMATION/DOCUMENTATION NETWORK



- to cooperate with particular emphasis on the identification of literature produced in the country and elaborate the input for the national agricultural bibliography.

In this proposed network, the individual participant library will maintain its identity and responsibility to its own constituency. In particular, each library remains responsible for selecting, acquiring, and processing to meet its special needs. The benefits to participant libraries and their users have been stated in Table 5.

Duration of the Project Proposal:

This proposal has been estimated to cover the fundamentals of establishing the agricultural information network of Guyana in a period of 24 months. Once these first recommendations, or at least the basic ones, have been accomplished it is necessary to provide continuity and implementation. At present, it is impossible or at least very difficult to foresee the feasibility of realizing other important network responsibilities and activities. This is due to the fact that many relevant decisions have to be made at the highest level, not only at the coordinating centre but at other important components such as the Ministry of Agriculture. It is suggested that during this first phase of the establishment of the network, after 24 months or at mid-term, an evaluation be made as additional projects, activities or adjustments to the present proposal may be necessary.

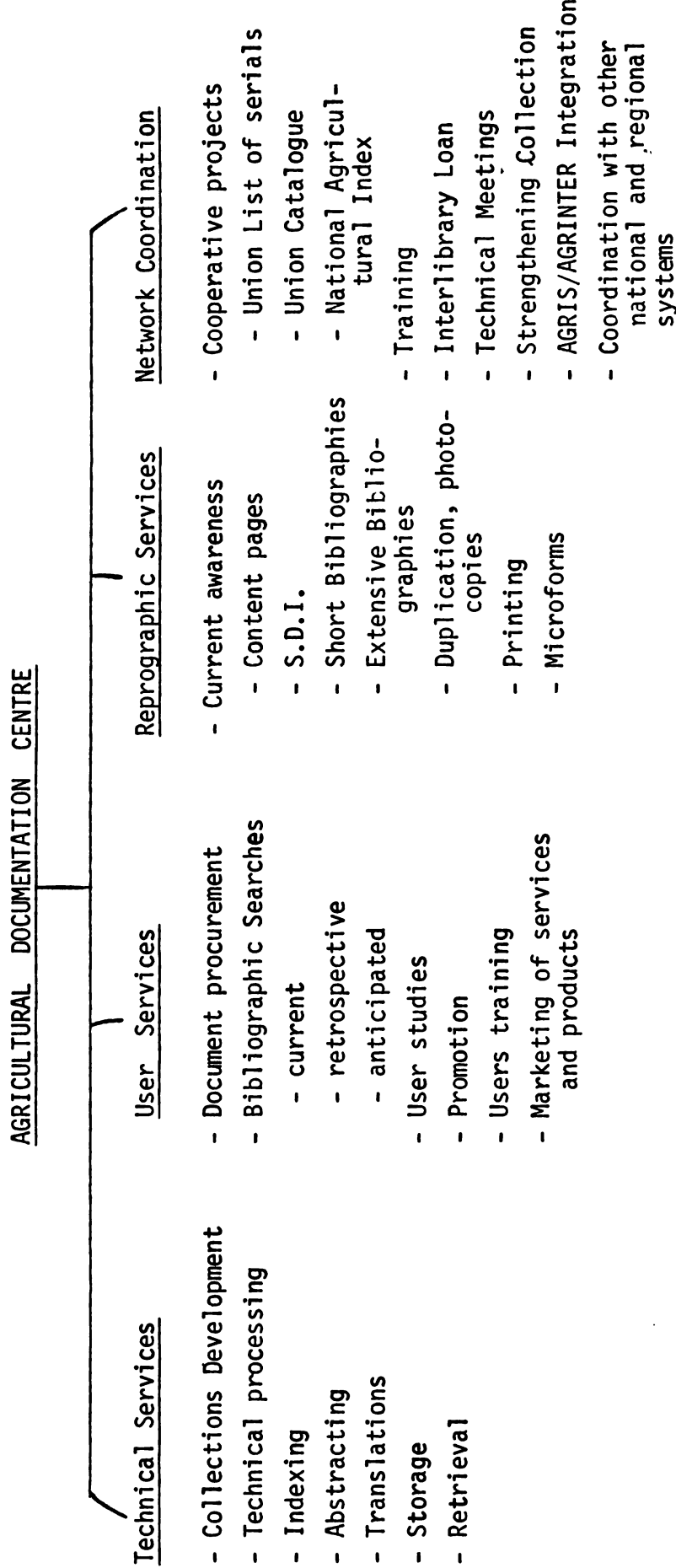
Specific recommendations and activities:

The recommendations and activities are suggested according to the necessities of a preliminary organizational/promotional phase, trying to be as realistic as possible. The mid-term evaluation that is suggested should provide the basis for adjustments and acceleration or anticipation of projects not included in the present proposal.

A pre-requisite for the planning and implementation of the agricultural information network is that component units must attain a minimum level of organization and operation.



FIG 4. MAIN FUNCTIONS OF THE CENTRE



The proposal should be oriented to upgrade, in its first phase of operation, at least eight (8) libraries as the basis for the integration of the future network. Special mention is made of the expected contribution of the library of the Central Agricultural Station at Mon Repos which should become a major component of the network.

The priorities in this phase of the proposed network are categorized as follows:

1. Formal establishment of the coordinating centre of the network
2. Promotional activities among the national authorities, the component institutions, libraries and users
3. Training programmes for librarians at different levels (specialized courses, basic training)
4. Technical assistance to the cooperating libraries
5. Planning and elaboration of systems tools
6. Planning and design of specialized services to users.

1. Establishment of the coordinating centre (UNIT)

It is evident that at present there is only one place that has the necessary resources and facilities to carry out such a function, namely the University of Guyana Library. Table 3 shows the figures related to its resources in comparison to those of the other units surveyed.

In addition, the following facts are to be taken into consideration:

- The University of Guyana Library is at this time serving as a National input centre for the international Agricultural Information Systems-AGRINTER/AGRIS.
- The University of Guyana Library is committed to the establishment of a faculty library to support the teaching and research programmes of the Faculty of Agriculture.

- The Agricultural documentation project, initiated by the National Science Research Council, has been handed over to the University Library, to be integrated with the proposed Faculty Library.
- A professional librarian has already been assigned the responsibility for the development of a basic collection of resources in the subject area of agriculture, to which has been added the NSRC Agricultural Documentation Project.
- Exploratory talks between authorities involved (Ministry of Agriculture, Faculty Library) have resulted in a favourable disposition towards the idea of merging the existing Central Agricultural Station Library, with the proposed Faculty Library.

Clearly, the University of Guyana Library should undertake the responsibility for making the necessary provisions to incorporate the functions of a documentation centre within its existing structure.

This activity of establishment of the coordinating unit includes:

- 1) Getting the official approval of the highest level to act as the National coordinating centre. This is important in order to secure the resources and authority necessary for carrying out the proposed network programmes and projects.
- 2) Manpower. In this preliminary stage of the network development, it is necessary to hire at least one unit of professional staff in addition to the one already existing to be responsible for the agricultural collection in the University of Guyana Library.

One unit will be in charge of all activities related to coordination of the network with the component institutions, and the other will be responsible for the operation of technical activities. A division of responsibilities will be made for technical cooperation, training and services to users.

The professional staff have to be dedicated full time to the coordination and supervision of the network. A Resident Consultant

at the international level is strongly recommended as an important counterpart to assist in the technical implementation of the project. One auxiliary staff, a secretary and one clerk-typist will be necessary to realise routine functions.

- 3) Space. Enough space should be allowed for new staff, equipment and office material. In this preliminary phase space is not required for documentary resources, since the agriculture collection is integrated into the general collection of the University of Guyana Library.
- 4) Equipment, Furnishings, Materials and Supplies. Basic tools and office material will be necessary for administrative functions, technical processes, training and technical cooperation, and specialized services to users.

2. Promotional Activities:

- 1) Elaboration of orientation programmes and the conduct of demonstrations of the organization, showing the benefits and services to be offered by the network.
- 2) Letter forms distributed to the institutional authorities and users, informing them of plans and progress of the network as well as the different types of support wanted.
- 3) Formal agreements of the network components have to be prepared, presented and signed.
- 4) National meeting of librarians and documentalists. Authorities of the institutions involved as well as users should be invited. Basic organization of the network and objectives should be in the programme, as well as component's responsibilities and benefits, special and regular projects and kinds of participation required from network components.

- 5) A pamphlet should be prepared and at least 1000 copies distributed to potential users and national authorities outlining the members of the network, the services offered, how to get services, possible service charges, network organization and inputs required from users.

3. Training Programme:

Organize and offer training activities with the cooperation of University Library staff, special national documentation units, and different experts during the execution of the recommendations of the proposal. As was stated in the findings of the survey, professional librarians are very scarce in the agricultural sector. Therefore to have them involved in the network development and implementation, some degree of special knowledge about the technical operation of the network has to be provided for them.

The training programme for this preliminary organizational phase of the network should include the following types of training:

- In-service training
 - Short special courses
- } In the country or abroad

It is strongly recommended that short training courses be organised and implemented at national level. It has been demonstrated that these courses cause a major impact and benefit to a larger number of people. Courses abroad are recommended mainly to "train the trainers".

It is suggested that the training programme covers in some degree the following topics:

- Organization of specialized information centres and services
- Design and provision of specialized services
- Analysis of information, abstracting and indexing
- Special agricultural collections-development and use

- National agricultural information flow and its integration at regional and international levels (AGRIS/AGRINTER)
- Exploitation of national and international information resources.

For in-service training within the country, the following places are suggested:

- CARICOM - Documentation UNIT;
- University of Guyana Library

Particular training places abroad are recommended as follows:

- ECLA - Documentation centre;
- University of the West Indies Library;
- Agricultural Department, Trinidad;
- CIAT-Colombia;
- BINAGRI-Brazil;
- CIDIA-Costa Rica;

Others can be added later on.

- 1) Provision should be made for at least three in-service training programmes abroad for the professional staff of the coordinating centre. These could be estimated on a basis of two-week periods. Topics will be chosen from the list of subjects already provided in this proposal as the possible places. The main objective of this type of training is to train the trainers in the national courses to be offered, and to provide them with some practical knowledge of the operation of similar centres in other countries.
2. At least three courses at the national level should be organized in this preliminary phase of the network proposal, each attempting to have the people of the component libraries involved in the development programme of the network. It is estimated that at least 12 persons at the auxiliary staff level will participate in the courses. It is recommended that the period for each course

be of two weeks' duration. Some experts from abroad could reinforce the national lecturers if their consultantship period coincides with the course dates.

- 3) Participation in technical meetings abroad will be an important type of training and coordination, since the national network is going to be integrated into regional and international information systems. The network should be represented in at least two specialized international meetings.

4) Technical Assistance

It will be necessary to carry out two kinds of technical assistance:

- Technical assistance that the coordinating centre provides to the network components in order to have them involved in the different stages of the network development, and
- Technical assistance needed by the network from abroad in the planning, design and implementation of the activities and projects of the network proposal.

Technical assistance from abroad will be recommended particularly in the following areas:

- Planning, design and implementation of information networks. This is necessary to initiate officially the operation of the proposed network and define the main activities as well as to adjust the schedule already proposed.
- Design and establishment of current awareness services and users' profiles, users' studies, etc.
- Computerized information services. It is convenient at a certain stage of development of the network to explore the possibilities of establishing some degree of automation in the processing or in the services. A feasibility study has to be made and a proposal produced by a systems analyst and computer specialist.

Coordinating centre technical assistance is a continuing activity during the different phases and activities of the network, in areas such as standardization of network; collections development; systems tools elaboration and use; adoption of new services or improvement of existing services.

A resident consultant at the international level is recommended for the implementation of the project. The advantages of having a resident consultant would be, among others, the following:

- a) The execution of the project, technically speaking, would have a greater possibility for success.
- b) It would ensure technical support to the national staff in the accomplishment of their responsibilities.
- c) It would give strong support to the projects' training components.
- d) It would strengthen the impact of the programmed short consultancies.

It should be borne in mind that this type of specialist is very limited in the world. If one is available, attractive living conditions and salary will have to be offered. Also, it is difficult to get this type of personnel for less than one year.

Technical assistance from abroad to the network is recommended early in the implementation of the proposal, to provide some guidance in the planning and organization of the network, selection of priorities for the activities and adjustments in the proposed schedule.

A second technical assistance mission would be necessary in the mid-term of the schedule to evaluate the programme accomplishments and give assistance in areas such as elaboration of system tools; etc.

A third and fourth mission would be carried out at the last part of the period to:

- a) prepare a feasibility study for the establishment of some computerized functions and services;

- b) make an evaluation of the project;
- c) participate in training activities; and
- d) prepare a report and make recommendations on the next phase of development of the network.

Technical assistance from abroad is estimated at missions of not more than two weeks each.

5. System tools development:

1. Inventory of relevant agricultural documentation produced in Guyana:

This activity tends to involve the components of the network in locating both old and current agricultural documents produced within the country. A mini-project could be derived from this activity in order to classify all the retrospective bibliographic references according to the AGRINTER/AGRIS codes. In this way a data base can be produced and upgrading will be much easier by computerized methods. Eventually this data base could be merged with those of the other Caribbean countries to present the users with a wider and more useful bibliographic tool. Other by-products can be produced such as special bibliographies by subject, chronological, commodities, etc. This computerized bibliography will be a union catalogue of the publications produced in Guyana.

2. Union list of serials in agriculture and related fields existing in Guyana: This activity requires the cooperation of the agricultural institutions in the network. It is necessary to determine the methodology to be followed in the collection, registration and updating of the information. Data has to be organized, published and distributed. Of particular interest is the orientation of the users in using it efficiently.

3. A union catalogue of books: This can be initiated during this phase of development as an exploration of what really exists mainly in terms of reference works. It has to be remembered that, generally speaking, the collections of books are not updated. Further, several classification schemes are used and a significant number of the collections are not classified at all.

4. Directories and guides: An updated list of information producers has to be developed to help the network in locating the documents as soon as they are produced, and to share the responsibilities of the components in "capturing" those documents. A list of basic agricultural libraries and "working collections" has to be prepared and updated continuously. It will be much more useful if it includes other agricultural libraries in the Caribbean region.

5. Communication: A network cannot work properly as such without a good communication system. The coordinating centre has to work in the establishment and improvement of the present communication channels such as: mail, radio, telephone, telecommunication or any other means of communication among the components.

Of particular interest for the network will be the acquisition of a vehicle. Transportation will be useful for interinstitutional loan; exchange of documents and distribution of different information products and services. It would be extremely useful to accelerate some other network activities such as training, technical meetings, technical assistance missions, etc.

6. Basic reference collection: It is recommended that the collections of the coordinating centre be strengthened, especially in those costly reference tools, which are essential in its capacity as a Referral center and to give support to the total network. In addition, it is necessary to reinforce the collections of the libraries, components of the network actively participating in its development and operation. This activity should be implemented once the union list of serials, the union catalogue of books and the national agricultural bibliography projects have reached an advanced stage of development. This will allow the coordinating centre to obtain some knowledge of the gaps existing in their collections as well as the emphasis in subject fields that each library needs to make according to its responsibilities within the network.

6. Planning and design of specialized services to users: The main services of documentation and information units are generally referred to as "responsive and alerting services" as they are provided either in response to requests from the different categories of users or on an anticipated basis to individuals and institutions according to their interest profiles previously elaborated.

According to the library development plan* and on experimental basis the project intends to establish some specialized information services, most of them in a cooperative effort with the network components. Briefly these are:

Current awareness service - which provides information to selected users on documentation produced in their fields of interest in current journals received at the centre or the network. This service includes "content pages", "short bibliographies" prepared on request of users and "lists of papers presented to national and international conferences", etc.

Enquiry services - where requests for scientific and technical information in answer to specific questions can be obtained from the centre. This includes the type of "referral services".

Document procurement service - which will obtain for users, a microcopy or reprint of any published article that he may request.

Translating service - which will provide the user with a translation or abstract of an article in a language understood by him.

Reprographic services - the centre will have access to equipment to provide the users with reproduction of documents either in its original size or in microforms. This service includes a selective distribution of photocopies to users in areas of high priority according to interest profiles previously elaborated.

*Univeristy of Guyana Library. Development plan 1981 - 1986. Georgetown, 1981
13p.

Users orientation - formal and informal advisory services in the use of information sources.

SITUATION AT END OF THE PROJECT

At the end of 24 months the project is expected to reach, among others, the following targets, as the first phase of implementation of the Agricultural Documentation and Information network for Guyana:

1. An agricultural documentation and information Unit created to constitute the nucleus of the national agricultural information network.
2. The following additional staff hired and trained.
 - 2 Documentalists
 - 1 Technical Librarian
 - 1 Secretary
 - 1 Clerk/Typist
 - 1 Administrative and Support Staff
3. At least five significant institutions of the agricultural sector participating in cooperative activities of the network. (Agreements of exchange; Inter-institutional loan; sharing of documentation resources; delivery of documents or input sheets to the coordinating centre; promotional and orientation activities).
4. An index of the national agricultural documents elaborated and distributed. A national union catalogue of books initiated.
5. A Union list of agricultural periodicals prepared and in operation within the network.
6. Some lectures, conferences and demonstrations given to national authorities and potential users; and an information pamphlet of the specialized services of the network elaborated and widely distributed.

7. A training programme elaborated and the following accomplished:
 - at least three coordinating centre staff trained abroad (intensive in-service training).
 - at least ten (10) people of the network received on-the-job training from the foreign experts proposed in the project.
 - at least two (2) coordinating centre staff attended technical meetings abroad dealing with AGRINTER/AGRIS Systems.
 - at least twenty (20) staff of the network components trained in short national courses, dealing with important aspects of the organization and operation of the network.
8. Appropriate space and facilities provided for the staff, materials and equipment in the coordinating centre.
9. Basic bibliographic collections upgraded in both the coordinating centre and at least four network components.
10. At least four specialized services being offered within a cooperative effort by the network components.
11. The flow of Agricultural documentation and information in Guyana systematized; the degree of the country's participation in regional and international information systems increased (AGRINTER AND AGRIS)
12. Mid-term and final evaluations of the project made and adjustments proposed, and a report with suggestions elaborated and presented to the authorities.

INSTITUTION RESPONSIBLE FOR THE EXECUTION OF THE PROJECT

The Librarian of the University of Guyana Library will be responsible for the administration and technical execution of the project.

The Institutions of the agricultural sector will participate in the operation of the project through their libraries cooperating in the network.

TOTAL COST OF THE PROJECT

For the implementation of this first phase of the projected network an amount of US\$258,000 will be required.

The University of Guyana will contribute the amount of US\$41,700 plus significant counterpart contributions in kind, general services, administration of the project and logistic support.

An amount of US\$216,300 will be required from external sources.



BUDGET

TABLE 1: ESTIMATED DETAILED BUDGET (24 months)

		US\$ Cost	Funds	
			National	International
- <u>PERSONNEL</u>	M/M			
2 Documentalists	48	16,000	8,000	8,000
1 Technical Librarian	24	4,000	4,000	---
1 Secretary	24	4,000	4,000	---
1 Clerk Typist	24	3,200	3,200	---
Administrative Support	12	6,000	6,000	---
- <u>TECHNICAL ASSISTANCE</u>				
1 Resident Consultant	24	50,000	---	50,000
4 International Technical Missions	2	8,000	---	8,000
- <u>EQUIPMENT & FURNISHINGS</u>				
2 Typewriters		1,600	---	1,600
Office Equipment		6,000	---	6,000
Office Furnishings		6,000	---	6,000
Photocopying machine and Accessories		6,000	---	6,000
- <u>MATERIALS & SUPPLIES</u>				
Office and Library supplies (Audiovisual Materials)		11,000	1,000	10,000
- <u>BIBLIOGRAPHIC MATERIALS</u>				
Reference tools		22,000	2,000	20,000
Basic collection		43,500	3,500	40,000
- <u>PROMOTIONAL ACTIVITIES</u>				
National meetings		2,000	---	2,000
Promotional Materials		1,200	---	1,200

Cont'd- TRAINING

3 In-service Training Abroad	10,000	---	10,000
3 National Courses	7,500	---	7,500
2 Technical Meetings Abroad	4,000	---	4,000

- SYSTEMS TOOLS

Agricultural Bibliography of Guyana (Publication & Distribution, 300 copies)	4,000	---	4,000
Union List of serials (Elaboration & publication, 300 copies)	2,000	---	2,000
2 Directories (Agricultural Specialists; Agricultural information sources, 300 copies)	1,000	---	1,000
Union Catalogue of Books	1,000	---	1,000

- COMMUNICATIONS

Telephone, postage, telecommunication	6,000	6,000	---
Local transportation (vehicle)	12,000	---	12,000

- USER SERVICES

Testing & promotional specialized services, photocopies, etc.	7,000	1,000	6,000
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- MISCELLANEOUS & GENERAL SERVICES

Reports, contingency, inflation, general services	13,000	3,000	10,000
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TOTALS	258,000	41,700	216,300
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TABLE 11: HUMAN RESOURCES REQUIRED (MAN/MONTHS)

	FIRST YEAR			SECOND YEAR		
	TOTAL	NATIONAL	INTERNATIONAL	TOTAL	NATIONAL	INTERNATIONAL
	Professional Staff	24	12	12	24	12
Non-professional	12	12	-	12	12	-
Support personnel	24	24	-	24	24	-
Consultants	13	-	13	13	-	13
TOTAL	73	48	25	73	48	25

TABLE 111: COST OF PERSONNEL (US\$)

	FIRST YEAR			SECOND YEAR		
	TOTAL	NATIONAL	INTERNATIONAL	TOTAL	NATIONAL	INTERNATIONAL
	Documentalists (2)	8000	4000	4000	8000	4000
Technical Librarian	2000	2000	--	2000	2000	--
Typist	1600	1600	--	1600	1600	--
Secretary	2000	2000	--	2000	2000	--
Administrative & Support	3000	3000	--	3000	3000	--
Consultants	29000	--	29000	29000	--	29000
TOTAL	45600	12600	33000	45600	12600	33000

TABLE IV: OPERATING COSTS (US\$)

ITEMS	FIRST YEAR			SECOND YEAR		
	TOTAL	NATIONAL	INTER-NATIONAL	TOTAL	NATIONAL	INTER-NATIONAL
PERSONNEL TRAINING						
In-service training	6000	--	6000	4000	--	4000
National courses	5000	--	5000	2500	--	2500
Technical meetings	2000	--	2000	2000	--	2000
SYSTEM TOOLS						
National Agricultural Bibliography	2000	--	2000	2000	--	2000
Union list of serials	1000	--	1000	1000	--	1000
Directories	500	--	500	500	--	500
Union Catalogue of Books	400	--	400	600	--	600
PROMOTIONAL ACTIVITIES						
National meetings	1000	--	1000	1000	--	1000
Promotional materials	600	--	600	600	--	600
EQUIPMENT & FURNISHINGS	12600	--	12600	7000	--	7000
MATERIALS & SUPPLIES	7000	500	6500	4000	500	3500
BIBLIOGRAPHIC MATERIAL						
Reference Tools	10000	1000	9000	12000	1000	11000
Basic collections	20000	1500	18500	23500	2000	21500
COMMUNICATIONS	3000	3000	--	3000	3000	--
Transportation (vehicle)	12000	--	12000	--	--	--
USER SERVICES	4000	500	3500	3000	500	2500
MISCELLANEOUS	5000	1500	3500	8000	1500	6500
TOTAL	92100	8000	84100	74700	8500	66200

TABLE V: SUMMARY BUDGET (US\$)

ITEMS	24 MONTHS			INTERNATIONAL
	%	TOTAL	NATIONAL	
Personnel	13	33200	25200	8000
Consultants	22	58000	---	58000
Operating Costs	65	166800	16500	150300
TOTAL	100	US. \$258000	41700	216000

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28. STRENGTHENING the information and documentation systems of the Central Agricultural Research Station of the Ministry of Agriculture in Guyana. Georgetown, Ministry of Agriculture, 1980, 10p. (Proposal to be submitted to IDRC, Canada and IICA, Costa Rica).
29. STRUM, F. and GOODLAND, J.R. The ecology of Guyana: a bibliography of environmental resources. Monticello, Illinois, U.S.A., Vance Bibliographies, 1978. 44p. (Public administration series, bibliography, p.61) 569 ref.
30. UNITED Nations Development Programme. Guyana Agricultural Situation. Port of Spain, UNDP, 1976. 46p.
31. UNIVERSITY OF GUYANA Bulletin 1979-80. Georgetown, Guyana, 1979. 123p.
32. _____. Library report 1979/1980. Georgetown, 1980. 24p.
33. _____. Library report 1978/1979. Georgetown. 1979. 23p.
34. _____. Proposal for the establishment of an agricultural library/documentation/information service. Georgetown, 1980. 4p.
35. WELCH, I.A. Selected list of reports, papers, etc. dealing with forest evaluation and forest reconnaissance surveys, aerial photo-interpretation, geology-soils and forest resource development, available from Forest Department records. Georgetown, Forest Department, 1976. 11p.
36. WISCONSIN UNIVERSITY. Land Tenure Center Library. Rural development in Venezuela and the Guianas: a bibliography. Wisconsin, 1972. 61p.

Main Agricultural Information/Documentation producers in Guyana
(Active and Potential)

1. Ministry of Agriculture
2. Guyana Museum and Zoo
3. Guyana Rice Board
4. Guyana Sugar Corporation
5. Livestock Development Company
6. Guyana Marketing Corporation
7. Guyana Food Processors Ltd.
8. Ministry of Economic Development
9. State Planning Secretariat
10. Upper Mazaruni Development Authority
11. National Library
12. National Science Research Council
13. University of Guyana
14. Society of Professional Agriculturalists of Guyana
15. Institute of Applied Science and Technology
16. Pharmaceutical Chemical Food Processing and Allied Group

Bilateral agencies who sponsor research or provide consultancy in
Agricultural and related fields:

17. IICA
18. United Nations Development Programme
19. European Communities
20. US Agency for International Development
21. Canadian High Commission
22. British High Commission
23. Caribbean Development Bank
24. IDB-Inter-American Development Bank
25. Caribbean Community Secretariat
26. CARDI
27. REPAHA



MAIN TOPICS COVERED BY THE SURVEY
(LIBRARIANS/PRODUCERS/USERS)

- ADDRESS
- YEAR ESTABLISHED
- STAFF: (Total
Professional
Non-professional
Person-in-charge)
- USERS (Potential
Active
Registered) (Information Needs
Alternative Solutions
Problems Encountered)
- SUBJECTS COVERED
- COLLECTIONS:
 - Special
 - Abstracting/Indexing services
 - Book Volumes
 - Journal subscriptions
 - Other
- CLASSIFICATION SCHEME AND RETRIEVAL SYSTEMS
- SERVICES PROVIDED:
 - Reading Room
 - Borrowing privileges
 - Current awareness services
 - Tailored SDI Services
 - Consulting Services
 - Photocopy Service
- COOPERATIVE ACTIVITIES (National or International)
 - Inter-library Loan
 - Exchange of Publications
 - Union Catalogues
 - Bibliographic Projects
- SPECIAL EQUIPMENT
- BUDGET:
 - Parent Organisation
 - Service Fees
 - Grants
 - Other

- IMPROVEMENT PLANS
 - Buildings
 - Staff (hiring & training)
 - Equipment
 - Collections
 - Services (extension/new)
 - Communication channels
- PUBLICATIONS:
 - Funding
 - Distribution
- SPECIFIC SUBJECTS OF INTEREST IN A NEAR FUTURE
- POSSIBILITIES OF COOPERATION IN A NATIONAL NETWORK
(as intermediaries, producers or users of information)
- INSTITUTIONAL SUPPORT TO INFORMATION/DOCUMENTATION PROJECTS & SERVICES



LIBRARIES IN AGRICULTURAL AND RELATED FIELDS

1. CARIBBEAN COMMUNITY SECRETARIAT LIBRARY
Fourth Floor, Bank of Guyana Building
Avenue of the Republic
GEORGETOWN
Tel. 02-69280-9
1970-
Mrs. Carol Collins, B.A., Dip. Ed., B.L.S.
Staff: 5
Agriculture; Communication; Transport; Customs and
Tariff Policy; Economics; Labour Relations; Marketing;
Statistics; Demography; Sociology; Trade.
6,000 Book Volumes
50 Journal Subscriptions in Agriculture
5 Abstracting and Indexing Services
Photocopy Service
Special Bibliographies on Request
New Publications List

- *2. FOREST DEPARTMENT LIBRARY
Water Street, Kingston
Georgetown
Tel. 02-66447
Forestry and Related Fields
3,700 Book Volumes
22 Journal Titles

3. GEOLOGICAL SURVEY LIBRARY
Guyana Geology and Mines Commission
Brickdam, Georgetown
Tel. 02-65851-3 Ext. 16
1954-
Staff: 3
Geosciences; Mathematics
14,000 Book Volumes
78 Journal Titles
7 Abstracting and Indexing Services

* Libraries not visited

4. GUYANA SCHOOL OF AGRICULTURE LIBRARY
 Mon Repos, East Coast Demerara
 Tel. 020-2804-5
 1966-
 Miss Halima Hydarali
 Staff: 2
 Agriculture and Related Fields
 2,500 Book Volumes
 20 Journal Titles
 Photocopying Service
5. INTER-AMERICAN INSTITUTE OF AGRICULTURAL SCIENCES
 299 Church Street
 Georgetown
 Tel: 02-68835, 68347
 1976-
 Staff: 1
 Working Collection of IICA Agricultural Subjects of Interest;
 IICA Publications; Planning and Development
 800 Book Volumes
 15 Journal Titles
 2 Abstracting and Indexing Services
 Photocopying Service
- *6. KURU-KURU CO-OPERATIVE COLLEGE LIBRARY
 Linden Highway
 Tel. 061-326/327
 1973-
 Miss Claire Adonai, B.A.
 Staff: 2
 Agricultural Enterprises; Business Administration; Food and
 Resource Development; Co-operatives.
 3,000 Book Volumes
 70 Journal Titles
7. LIVESTOCK DEVELOPMENT COMPANY (LIDCO)
 58 High Street, Kingston
 Georgetown
 Tel: 02-60952
 Working Collections: Veterinary Medicine; Animal Husbandry
 600 Books
 51 Journal Titles

* Libraries not visited

8. **MINISTRY OF AGRICULTURE**
 Veterinary and Livestock Science Division
 New Garden Street
 Georgetown
 Working Collections: Animal Production; Veterinary Science
 500 Book Volumes
 26 Journal Titles
 7 Abstracting and Indexing Services
9. **MINISTRY OF AGRICULTURE LIBRARY**
 Central Agricultural Research Station
 Mon Repos
 East Coast Demerara
 Tel. 020-2881-3
 Miss Leila Waldron
 Staff: 1
 Agriculture and Related Fields
 3,000 Book Volumes (No classification Scheme)
 100 Journal Titles
 35 Abstracting and Indexing Services
10. **MINISTRY OF WORKS AND TRANSPORT LIBRARY**
 Fort Street, Kingston
 Georgetown
 Tel. 02-69221 Ext. 35
 Miss Maureen Persaud
 Staff: 3
 Hydrometeorology; Hydrology; Climatology; Electricity;
 Civil Engineering; Applied Science and Technology
 2,000 Book Volumes
 50 Journal Subscriptions
 2 Abstracting and Indexing Services
11. **PHARMACEUTICAL CHEMICAL FOOD PROCESSING AND ALLIED GROUP LIBRARY**
 Public Road, La Penitence
 Tel. 02-63281 Ext; 60
 Telex - 2203 LIMACOL GY
 1980-
 Jean Craigwell, A.L.A.
 Staff: 2
 Pharmaceutical; Food Processing; Marketing; Pesticides; Agro
 Industrial Chemicals
 600 Book Volumes
 60 Journal Subscriptions
 2 Abstracting and Indexing Services



12. UNIVERSITY OF GUYANA LIBRARY

University Campus
Turkeyen
East Coast Demerara

Tel. 02-54841

1963-

Mrs. Yvonne Stephenson, A.L.A., M.L.S.

Staff: 65

General: Agricultural and Related Fields; National Agricultural
Collections; Caribbean Research Library

110,000 Book Volumes

120 Journal Titles in Agriculture and Related Fields

25 Abstracting and Indexing Services

Photocopying Service

Bibliographies on Request

Microformats

I T I N E R A R Y

Visit of UNESCO Consultant in Agricultural Information
Mr. Orlando Arboleda
January 26 - February 11, 1981.

- | | | | |
|-----------------------|---|------------|---|
| MONDAY, January 26 | - | 8.00 a.m. | Inter-American Institute of
Agricultural Sciences
Dr. Reginald Pierre, Director |
| | | 10.00 a.m. | University of Guyana Library
Yvonne V. Stephenson, Librarian
Olive King
Olive Sahai
Luti Salisbury
Joel Benjamin
Frank Kyei
Phillip Jeffrey
Jennifer Jackson
Jennifer Isaacs |
| TUESDAY, January 27 | - | 8.45 a.m. | Visit to University Library |
| WEDNESDAY, January 28 | - | 10.00 a.m. | Dr. Prashad, Dean, Faculty of
Agriculture |
| | | 11.15 a.m. | Courtesy call on Dr. Dennis Irvine,
Vice-Chancellor, University of
Guyana |
| | | 1.30 p.m. | Cde. C. Jarvis, Secretary-
General for UNESCO in Guyana |
| | | 3.00 p.m. | Dr. U. Trotz, Director of
Institute of Applied Science
and Technology |
| THURSDAY, January 29 | - | 8.30 a.m. | Medical Science Library
Cde. Maureen Wren, B.A., Librarian |
| | | 10.00 a.m. | Cde. G. Lee, Executive Chairman,
Guyana Pharmaceutical Corporation
and
Cde. Jean Craigwell, Librarian |
| | | 11.00 a.m. | Cde. Marilyn Hope, Librarian,
Geological Surveys |
| | | 2.30 p.m. | Cde. Yesu Persaud, Chairman,
Guyana Liquor Corporation |
| | | 3.30 p.m. | Cde. Maureen Persaud, Librarian,
Ministry of Works and Transport |

FRIDAY, January 30	-	9.00 a.m.	<p>Guyana School of Agriculture Mon Repos Cde. Desmond Nicholson, Principal Lecturer Cde. Halima Hydarali, in charge of the Library</p> <p>Cde. Walter Matadial, Principal Agricultural Officer (Education and Extension)</p> <p>Cde. Harry Persaud, Principal Agricultural Officer (Crop Sciences)</p> <p>Cde. Leila Waldron, in charge of the Library</p> <p>Central Agricultural Station, Mon Repos</p>
SATURDAY, January 31	-	10.00 a.m.	<p>Cde. A. Chin, Research & Extension Officer, Guyana Rice Board</p>
MONDAY, February 2	-	8.30 a.m.	<p>Cde. G. Muller, Other Crops Division, Guysuco</p>
		9.30 a.m.	<p>Cde. John Browman, Chief Agricultural Officer, Ministry of Agriculture</p>
		11.00 a.m.	<p>Dr. Steve Surijbally, LIDCO</p>
		2.30 p.m.	<p>Cde. Joan Christiani, Chief Librarian, National Library</p>
		3.00 p.m.	<p>Cde. George Burnham, Museum</p>
		4.00 p.m.	<p>Cde. V. Yong Kong, Guyana Sugar Corporation</p>
TUESDAY, February 3	-	9.00 a.m.	<p>Visit to Guymine Library, Cde. Elfreda Lewis, Librarian Cde. Kenrick W.W. Lewis, Administrative Co-ordinator</p>
		7.30 p.m.	<p>At Home, Mrs. Stephenson</p>
WEDNESDAY, February 4	-	9.30 a.m.	<p>Dr. Pat Munroe, Secretary-General, National Science Research Council Prof. J. Niles, Man and the Biosphere Programme, National Science Research Council Cde. McMurdoch, Librarian, National Science Research Council</p>

WEDNESDAY, February 4 - 10.30 a.m.

Dr. A.V. Downer, Agricultural
Research Officer, NSRC

2.30 p.m.

University of Guyana Library,
Professional Development Seminar

GUYANA: STATISTICAL PROFILE (*)

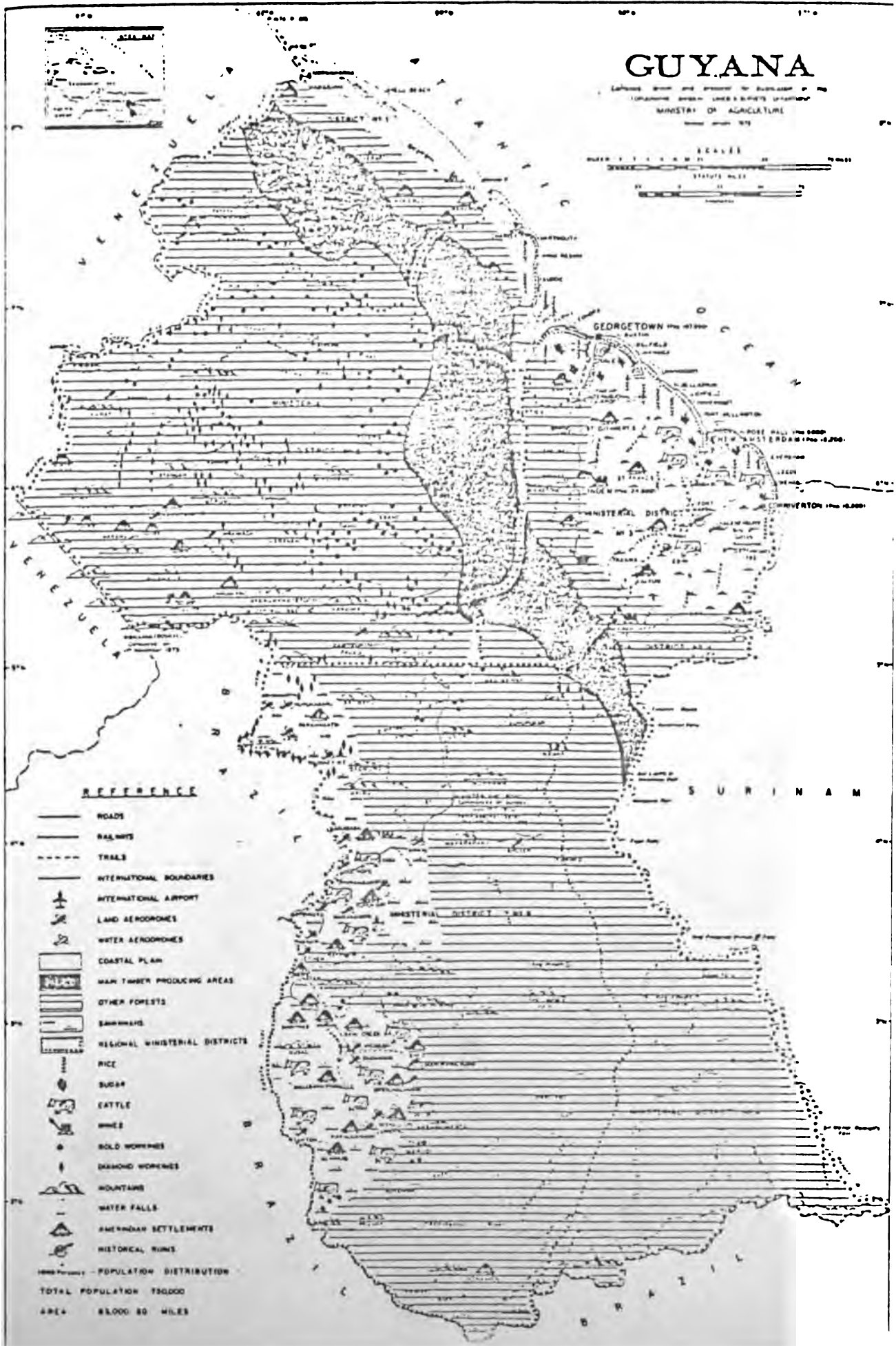
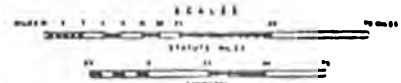
Area (km ²)	214,970
Estimates of total midyear population:	
1979	835,000
1985	925,000
Percentage of urban population (1979)	45,6
Annual Rate of Growth of Total Population (percent)	
Average (1970-79)	1,7
Gross Domestic Product (Millions of 1978 dollars)	
1979	503,7
Gross Domestic Product per capita (1978 dollars)	
1979	603,2
Rates of Annual Growth (percent)	
Total GDP in 1960-79	2,5
GDP per capita in 1960-79	0,6
Percentage of total central government expenditure for:	
Education (1979)	12,0
Public Health (1979)	4,4
Housing (1979)	0,6
Exchange rate (units of the national currency per dollar)	
December 1979	2,55
April 1980	2,55
Percentage of Literacy (1978)	86,0

(*) Extracted from:
 Inter-American Development Bank. Economic and Social Progress
 in Latin America. 1979 Report. Washington, D.C., 1980, pp 282-283
 (Spanish Edition)



GUYANA

Map of Guyana showing the location of the Ministry of Agriculture and the Ministry of Lands and Survey.



REFERENCE

- ROADS
- RAILWAYS
- TRAILS
- INTERNATIONAL BOUNDARIES
- INTERNATIONAL AIRPORT
- LAND AERODROMES
- WATER AERODROMES
- COASTAL PLAIN
- MAIN TIMBER PRODUCING AREAS
- OTHER FORESTS
- SARAWANG
- REGIONAL MINISTERIAL DISTRICTS
- RICE
- SUGAR
- CATTLE
- WHEAT
- BIRD WORKINGS
- DIAMOND WORKINGS
- MOUNTAINS
- WATER FALLS
- AMERICAN SETTLEMENTS
- HISTORICAL RUINS
- POPULATION DISTRIBUTION
- TOTAL POPULATION 196000
- AREA 85,000 SQ MILES



IICA
U20
470

Sharing agricultural
documentation and
~~information resources in~~
Guyana.

Autor

Título

Fecha
Devolución

Nombre del solicitante

DOCUMENTO
MICROFILMADO

Fecha: 23 DIC 1982