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End-of-Tour Report
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To place this End-of-Tour report in proper perspective, it must be noted at the outset this is a followup to the report produced after my initial visit to the Library at the Institute of Agriculture and Animal Science of Tribhuvan University at Rampur, Nepal, in May/June 1979. I am pleased that significant progress has been accomplished regarding library development at IAAS since that initial visit. Mrs. Jeanne Wood, working as an assistant to the IAAS librarian during 1981-1982, must be noted for implementing many of the practical aspects of the 1979 report. Considerable progress has been made regarding proposed activities in the areas of staff training, bibliographic organization and collection development, including the establishment of the proposed Documentation Bank (now called Documentation Center). Also, there were notable improvements to the proposed building plans, some suggested by me and others evidently developed on site.

As stated in the introduction to my previous report, the IAAS Library needs to be developed as a collection of information resources and services meeting the developing curricular and applied research programs of the Institute. As previously noted, the IAAS Library's collection is substantial in both quantity and quality, given its relative youth (established in 1972); but future development of the Library and its collections must emphasize quality rather than quantity. The establishment of collection development policies, as well as recruitment and continuous formal and informal training opportunities for library staff must be among the Institute's higher priorities if the Library is to meet the future as well as the near-term needs of the faculty and students.

The basic areas of library operations requiring primary attention are still the same as those identified in my previous report: administrative decisions; staffing and staff development; collection organization and

development; library services; and the physical facility. Therefore, for easy cross-referencing, the format of this report will follow that established in my 1979 End-of-Tour report.

1. ADMINISTRATIVE DECISIONS:

There are several major administrative matters that must be given careful consideration before initiating any new projects or directions for the IAAS Library, or for that matter, before moving ahead with expansion of currently operating goals and objectives.

Recommendation 1.1/83: In order to plan for effective library resource management, consideration needs to be given to the concept of an IAAS Library System. Currently there are three libraries within IAAS: the major collection and facility at Rampur; and two smaller collections, one at the Paklihawa campus and one at the Lamjung campus. Each of these three libraries currently functions as an autonomous unit--no resources (collections, personnel, nor monies) are shared in an organized fashion. Each of the three libraries is administratively independent and effective communication (either formal or informal) between the 3 libraries--or personnel within the libraries--is currently minimal.

Given the limited library resources within Nepal, effective management of available resources (manpower, collections and monies) becomes a high priority concern. I propose the 3 libraries within IAAS be organized into a system, administratively sharing monies, personnel and collection development and bibliographic control activities. I recommend the library at Rampur serve as the Central Library in this IAAS Library System; the smaller libraries would serve as branch or departmental libraries depending on the Central Library at Rampur for professional services (e.g. cataloging, collection development, and

in-depth reference services) as well as administrative and personnel management. Collections would be cooperatively developed (that is, each serving the immediate needs of its primary user group but not striving for "stand alone" stature); this would lead to development of shared collections through a document delivery or interlibrary loan system. Both collections development and document delivery (interlibrary loaning) would be coordinated and administratively managed through the Central Library at Rampur.

Professional personnel--at least two librarians--would initially be concentrated in the Central Library and responsible for system-wide collection development, bibliographic control activities (acquisitions, cataloging, database management) and staff supervision. The branch libraries, while maintaining current staffing levels but improving their collection's organization and content, would benefit from easy access to a larger resource through effective sharing of resources via interlibrary loan arrangements. The branch libraries, in effect, would improve available services while continuing to function with clerical staff, but under the direct supervision of the librarian(s) at Rampur.

As described later in this Planning Document, shared information and resources regarding journal collections, current acquisitions, and reference sources, would be available throughout the system.

This proposed IAAS Library System makes efficient use of scarce library resources and encourages development of cooperative programs through:

- a) Shared Collection Development; all acquisition requests would be processed through the Central Library, and approved--or not approved--by the librarian(s) and/or a library committee, based on guidelines established in a Collection Development Policy.

- b) Shared Catalogs; all monographic cataloging would be done by the professional staff at the Central Library in Rampur before the materials were distributed to the requesting libraries. The Central Library at Rampur would produce two card sets for each title catalogued; one set for the requesting library's card catalog and one set for the Union Catalog of all materials catalogued within the system. The Union Catalog would be maintained in the Central Library. Eventually, cataloging information should be put on a microcomputer with each library in the system receiving a periodic printout updating their information of catalogued materials available throughout the system (see Recommendation 4.3/83). Meanwhile, currently available software packages to produce card sets via microcomputer should be investigated (see International Inventory of Software Packages in the Information Field, 1983).
- c) Shared Journals List; as with the shared monographic catalog, I also recommend that a database of all journal holdings--both titles currently received and those ceased--be input into a microcomputer and periodic updates be distributed throughout the system. Thus all users would have access to current information regarding journal holdings throughout the IAAS Library System (see Recommendation 4.3/83).
- d) Shared Resources; system-wide information regarding catalogued monographic materials and journal collections lead naturally, if not immediately, to the sharing of resources among users of the Library System. Interlibrary loaning, although not yet functioning among libraries in Nepal, at least not to my knowledge, is a necessary reality for libraries throughout the world. As libraries in Nepal

continue to develop and the users become more sophisticated, a growing demand for sharing resources will develop. The proposed IAAS Library System could serve as a model for collection development, resource sharing, effective use of new technologies and staff development for libraries throughout Nepal.

The proposed IAAS Library System is a radical departure from the current situation, administratively as well as philosophically. However, the proposal is based on effective use of limited library resources. Hopefully, major IAAS Library development decisions regarding library policies, collection development priorities, or organizational philosophies will not be implemented without considering the proposed Library System. Eventually administrative and financial assistance could be sought from external donors to develop, coordinate and implement a network of libraries throughout Nepal. Each cooperating library in such a network would have assigned collection development responsibilities and participate in sharing resources via a coordinated document delivery system. Such a national program requires a great deal of planning at a very high level, but the basic idea of shared library resources (personnel, collections and fiscal) could be readily expanded if proven economical, functional and administratively possible on the smaller scale suggested here as an IAAS Library System.

Recommendation 1.2/83: The librarian continues to be held personally accountable for materials in the Library's collection. This financial responsibility of the librarian looms as one of the major deterrents to development of the IAAS Library.

Although it is my understanding the librarian has not been held actually financially accountable for library materials in the recent past, the possibility does still exist. Such financial responsibility inhibits the librarian in these circumstances from encouraging greater use of the collections and implementing expanded services--since all such developments increase the risk

of lost materials and, hence, the increased financial liability of the librarian. Such a policy of accountability is stifling library development; I again recommend that the librarian's personal accountability for the collection be discontinued.

2. STAFFING AND STAFF DEVELOPMENT:

Recommended staffing patterns for the IAAS Central Library remain the same as in my previous report, i.e. two professional librarians, one clerk-typist, and two clerks. This means the addition of one professional and one clerk to the library's current staff. Suggested staffing responsibilities and task assignments remain the same as in my 1979 report.

Recommendation 2.1/83: Much progress regarding staffing and staff development has been made since my earlier visit; B. H. Devkota, the current professional librarian, is intelligent, conscientious, has a positive attitude about his job and the potential of the IAAS Library. Devkota has received sound training in basic aspects of bibliographic control, namely cataloging and classification. He exhibits an intellectual understanding of the principles and organization of cataloging systems, as well as a practical understanding of the principles involved in the myriad procedures associated with classification schemes and bibliographic control in general.

However, Devkota currently lacks the training and experience to more fully develop service aspects necessary for further development of the IAAS Library. Specifically, attention must be given to development and use of a reference collection to meet a growing demand for reference services (see Recommendation 4.1/83) and to sufficiently develop the Documentation Center to serve potential research needs (see Recommendation 3.6/83). It is my impression that Devkota has potential; however, to enable him to move the IAAS

Library forward significantly he needs more exposure to other librarians and to additional ideas and concepts of information use and control.

Following are several English-language educational and/or training* programs for librarianship in Southeast Asia that seem appropriate for agricultural librarians. Perhaps the most notable regional program is at the University of the Philippines (Institute of Library Science, Gonzalez Hall, Quezon City D-505). The 9-month Post Graduate Training Course for Science Information Specialists in Southeast Asia was initiated there in August 1978, with assistance from UNESCO, UNDP, the British Council, and the National Science Development Board (Philippines). The course, expanded to a one-year program and greatly influenced by the American pattern of library education, was intended to provide intensive training in information handling and

*It is generally convenient to consider education and training together. However, there are occasions--and I believe this is one--when it is important to differentiate the two concepts.

Education for a vocation or a career introduces students to vast areas of knowledge and experience, resulting in practitioners knowing what to do and how to do it; but, through application to the disciplines over a number of months or years, they will also have developed attitudes and commitments about why -- a career or professional philosophy.

Training, by contrast, is primarily concerned with operations. These operations are generally limited, and we tend to associate training with short specialized courses. These courses are designed to develop existing skills or introduce new ones to add to the trainees existing task capabilities (Bell, p. 54). Training generally involves less time (and therefore less money) in the process, resulting in less time away from the job. However, the results are often of a shorter commitment to the job, less than a commitment generally associated with a profession.

The distinction is important here. Are we training someone to develop a skill to perform the task at hand, or are we developing attitudes and a professional commitment to librarianship in Nepal? Philosophically, we may be committed to the professional aspects; but for short-term practical reasons, we may choose the more expedient training approach to fill a gap and get on with the job (so to speak). I raise the issue simply to point out that the choice--education or training--is a conscious choice and the decisions must be made realizing the near-term results and the longer-term implications.

processing to those employed in information centers, documentation centers, libraries, resource centers, or data banks in Southeast Asia. (International Handbook of Contemporary Developments in Librarianship, p. 286.) This program, although of considerable substance and stature, is currently undergoing donor realignment and administrative reorganization. The program itself is evidently evolving into a 2-year Master's program (Wing, personal communication, 1984). More information about this course and its current status should be gathered once a more definite time frame for educational training exists. (It is my understanding 2 librarians from Nepal are currently enrolled in the program: one from RECAST, and one from the Industrial Services Centre.)

Another library program of note is at the Documentation Research Training Centre in Bangalore, India. I generally tend to fault training programs of India as too theoretical and lacking in applied skills. However, Clive Wing, formerly a UN Volunteer and Library Consultant at APROSC and currently Director of the Information Science Division at the IDRC Regional Office for Southeast Asia in New Delhi, assures me the course in Bangalore is sound on both theory and technique. This is a one-year course with an international profile; participants do need a degree in a basic science.

The Indian National Scientific Documentation Center, in New Delhi, offers both one- and two-year courses in Information Science. However, this Center has national obligations regarding library and information services, as well as document publishing and distribution; hence, not as much emphasis or attention is given the training programs as at the Documentation Research Training Center in Bangalore. (In fairness, I should note here that the Department of Library Science at the University of Delhi does specifically mention agriculture among courses offered in their curriculum. However, I am suspect of theoretical versus applied instruction at the University of Delhi.)

I am also aware of a training program for librarians at the Asian Institute of Technology in Bangkok; however, I have not been successful in obtaining specific information about this program.

There are also advanced educational programs in librarianship in Australia that could prove beneficial: one at the Canberra College of Advanced Education (School of Liberal Studies, P.O. Box 381, Canberra City, ACT 2601) and another at the University of New South Wales (School of Librarianship, POB 1, Kensington, NSW 2033). Both of these graduate programs are of 1-year duration, accept foreign students, and are accredited by the Australian Library Association.

In addition, according to Clive Wing, several possibilities exist for arranging special short-term courses by request. One of these is at the University of the Philippines at Los Banos. The person to contact there for exploring possible arrangements is:

Ms. Leonor B. Gregorio
SEARCA, College
Laguna 3720
Philippines

Another possibility is at the Agriculture University of Malaysia. The person to contact there is:

Syed Salim Agha
Library
Agriculture University of Malaysia
Serdang
Selangor, Malaysia

I might also add that the University of Pittsburgh is currently offering courses in Agricultural Documentation, some designed exclusively for overseas students. While there now exist nearly 70 accredited graduate programs in library science throughout the United States and Canada, only this institution offers any form of specialization in the field of agricultural information

service; however, the institution lacks strong tradition and capabilities in the agricultural sciences.

Recommendation 2.2/83: One additional full-time Assistant Librarian is a top-priority need before developmental efforts at the IAAS Library can significantly progress. With the current expansion of responsibilities (e.g. acquisition of materials, bibliographic control of books and documents) and the addition of projects proposed in my previous as well as current report (e.g. expanded reference services, development of the journal collection, actively increasing the scope and coverage of the Documentation Center, production of a serials and possibly other databases, initiation of interlibrary loan or document delivery services, and development of an IAAS Library System, etc.), the IAAS Central Library cannot develop to its full potential with only one professional staff member.

Realizing professional librarians are a scarce resource in Nepal--and recognizing the fact that a librarian with an agricultural background is undoubtedly an even less available commodity--I propose an agricultural subject-specialist wanting to remain in the Rampur area and interested in library work be recruited as the additional IAAS Assistant Librarian.

Given Devkota's current level of training in various technical aspects of bibliographic control (i.e. collection development, cataloging and classification), I suggest searching for a subject-specialist interested in service aspects of the Library (e.g. reference services, bibliographic instruction for students and faculty, and identifying and communicating with agricultural researchers and research institutions throughout Nepal.)

Devkota is capable of training this new Assistant Librarian in some of the basic acquisition and cataloging skills, as well as imparting a basic understanding of appropriate materials and sources to offer elementary

reference services. This in-house training should be sufficient to maintain the library during Devkota's absence for additional professional education or training. (This would be especially true if there is also any donor-sponsored trained personnel onsite. See Recommendation 2.4/83.)

Hopefully, by the time Devkota returns to IAAS, the subject-specialist would have sufficient library experience that it would be possible to determine if that person is sufficiently interested in--and worthy of--further education or training in librarianship. If so, then I foresee within 3-4 years the IAAS Library having in place 2 professional librarians with agriculture-related subject backgrounds. This proposal meets the goal of training Nepalese and provides a firm foundation for developing the IAAS Library as an outstanding agricultural library in Nepal, one worthy of participation in and contributing to any proposed agricultural information networking within Nepal or Southeast Asia.

Recommendation 2.3/83: Annual funding for both formal and informal staff development activities needs to be included as a line item in the budget. As stated in my 1979 report, continuous staff development activities for the professional staff as well as for the support staff is of the utmost importance. This becomes even more important as the proposed IAAS Library System develops. Only by attending national or international meetings, seminars, workshops or similar conferences does the library staff have opportunities to share ideas, discuss problems and alternative solutions, to broaden their understanding or awareness of information services, trends and changes, and to develop contacts with other professional librarians. Such experiences are important to staff and library development anywhere, but especially so in an isolated site such as Rampur.

Recommendation 2.4/83: I am willing to continue in my role as consultant or adviser, remaining available for periodic outside reviews of progress and recommendations regarding major objectives, policies and guidelines for the IAAS Library. In this capacity, I am able to objectively see problems in situ and offer realistic, practicable solutions and, over time, oversee their adoption and development.

However, a project such as this, for practical day-to-day development purposes, needs someone with advanced professional training and practical library experience available to guide the onsite project through the day-by-day decisions necessary for the implementation of the overall goals and objectives outlined in the planning documents. For this, as stated in my 1979 report, I recommend the establishment of a program for the librarian(s) to serve as counterparts to a donor-sponsored onsite consultant or a library-trained volunteer, perhaps from Great Britain's Voluntary Service Overseas (VSO) program or the U.S. Peace Corps. During my recent stay in Nepal, Dr. W. Combs and I visited with B. Joshee, Science and Math Program Director of Peace Corps Nepal. From our conversation, it would appear the Peace Corps may currently be willing to consider stationing a P.C. Volunteer with a library background at IAAS. More followup would have to be done on our brief visit; however, any request for such assistance from the Peace Corps would have to come from the Institute.

3. COLLECTION ORGANIZATION AND DEVELOPMENT:

Several of the high-priority goals and objectives identified in my previous report have been pursued and, in several instances, implementation achieved:

- a) the monographic collection has been brought into Dewey classification order,

- b) the journal collection has been organized (although left uncatalogued and unclassified, as recommended), a title file and check-in system have been devised, a satisfactory bindery has been identified in Kathmandu and the majority of completed journal volumes have been bound,
- c) an IAAS Documentation Center (called Documentation Bank in my previous report) for the collection and organization of non-conventional materials relevant to applied agricultural research in Nepal has been established within the Library. This Documentation Center currently contains approximately 2500 unique titles accessible via author, title, or subject. The continued development of this Documentation Center needs to be given very high priority (see Recommendation 3.6/83).

Recommendation 3.1/83: A vast amount of resources (both human and fiscal) have been invested in cataloging the IAAS monographic collection. It is important that this function be maintained and built upon. Collection development goals must be firmly established and practiced, the collection must be kept up-to-date with appropriate materials, items must be catalogued and made accessible as expediently as possible, and the staff must continue to be trained in cataloging operations and kept up-to-date in the latest cataloging techniques. Cataloging short courses are an appropriate training program to further develop and/or update established skills. I also propose exploration of the possibility of establishing an online catalog (see Recommendation 4.3/83).

Recommendation 3.2/83: A Collection Development Policy, including clearly defined goals and objectives, needs to be established. I continue to stress that the Library's resources should be regarded as a collection of

materials to support both the curriculum and research needs of the Institute. With the growing number of trained researchers on the faculty and the subtle but increasing emphasis for applied research to meet the agricultural needs of Nepal, as well as criteria for merit review and promotion of faculty members, the collection development practices of the Library must shift from simply supplying multiple copies of textbooks--a bookstore function--for classroom instruction to emphasizing and providing data and other background information to support applied agricultural research. Some library materials will supplement the instructional needs of the classroom, but the primary goals of collection development must shift to supporting the developing applied agricultural research needs of the Institute.

With the development of the proposed Agricultural Communication Services Centre (ACSC), the support services (materials and expertise) needed to produce effective classroom and laboratory teaching materials and to support extension activities will be available on campus--to both faculty and students. Library acquisition funds are thus freed from curricular materials purchases to more appropriate collection development purposes, such as research journal subscriptions, microforms, reference materials (e.g. dictionaries, directories, statistical works, indexing and abstracting tools, etc.) and special-subject monographs.

Recommendation 3.3/83: As curriculum development progresses and greater attention is focused on applied agricultural research and extension activities, there will develop a growing need for current research journals to be readily available in the IAAS Central Library and eventually throughout the proposed IAAS Library System. I recommend the journal collection remain uncataloged and unclassified. More attention does need to be paid to shelf organization and the reshelving operation. Both bound and unbound journals should be arranged alphabetically by title and maintained in that manner.

Repeating what I stated in my previous report, it will ultimately be in the best interests of IAAS--and Nepal--that every possible effort be made to meet the expanding needs for a substantial agricultural research journal collection. Such a research journal collection--in hard copy or film, the content is what is important--will undoubtedly prove to be one of the IAAS Library's greatest assets and a cornerstone of the applied agricultural research efforts in Nepal. Once again, it is my recommendation that no expense be spared in establishing, developing and maintaining this journal collection and the indexing and abstracting tools to support its use.

Recommendation 3.4/83: Major indexing and abstracting tools need to be provided for access to the growing journal collection. MUCIA has initiated a subscription to the Bibliography of Agriculture, a major index to general agricultural literature. Subscriptions for several special-subject abstracting tools from the Commonwealth Agricultural Bureaux have also been initiated recently by MUCIA: Nutrition Abstracts & Reviews (Livestock); Rural Development Abstracts; Rural Extension, Education and Training Abstracts; and Soils and Fertilizers. Such subscriptions need to be continued and the number of titles expanded. (See Appendix A for current journal subscriptions; Appendix B for selected primary indexing and abstracting services.) Such subscriptions need to be continued and the number of titles expanded. (See Appendix A for current journal subscriptions; Appendix B for selected primary indexing and abstracting services.)

Recommendation 3.5/83: It is my recommendation that microforms offer a viable alternative and a feasible means of collection development for the IAAS Library; this is especially true for research journals and indexing tools, but also valid throughout the collection. Types of materials generally available in microform include: journals (current issues, as well as back files);

monographs; dissertations; proceedings; government publications; research reports; older works long out of print; and library tools, such as indexing and abstracting titles, Union Lists of Serials and COM catalogs (Computer Output on Microform catalogs). Any or all of these types of materials could prove extremely useful to the IAAS Library in present or future collection development activities. Microforms are a storage medium for data; microforms are unique in form only--not content. As an information source, there is no difference between print and microforms. The principle criterion for acquiring any item in any format is the value of the content of the material to the Library's collecting goals and objectives as well as to the users' needs. As stated previously, collection goals and objectives need to be developed as a policy statement; microforms are one of the available formats for acquiring materials meeting the criteria established within a Collection Development Policy.

The establishment and development of a microform collection in the IAAS Library (or any library) is a process that must be based on a planned and well-defined policy that looks at immediate as well as longer-range objectives, considering changing user needs (in this case, a growing research-oriented use of the collection), budgets (both current and projected) and use of space. A well formulated Collection Development Policy for the IAAS Library System would also include specific guidelines for the selection and acquisition of microforms. (Perhaps the best overall guide to the evaluation of microforms is Allen B. Veaner's The Evaluation of Micropublications. See attached bibliography)

Microforms permit rapid building of major collections, such as the research journal collection development project suggested for the IAAS Library (see Recommendations 3.3/83 and 3.4/83). Microforms also reduce or eliminate

binding costs, preservation problems and loss of shelf space incurred with traditional print materials. Since their uniqueness is form rather than content, all other characteristics of microforms relate to their reduction ratio, including factors such as compactness, light weight (for mailing purposes), and relative permanency of record (Folcarelli, Tannenbaum, et al., p. 10). These special features of microforms translate into the following advantages for the IAAS Library:

- a) Accessibility and Availability; Literally millions of titles are currently available in microform (and in some instances, microform is the only form of publication), and more sophisticated announcement and distribution systems are making acquiring microforms a relatively easy task (see Appendix C for a brief listing of major micropublishers). Microform output, both in number of titles and in total volume, will continue to increase rapidly, assuring ever greater choices at possibly reduced relative costs. Also, COM catalogs and union catalogs of general library holdings will continue to expand because of (not despite) the development of online databases.
- b) Economy; Generally, a savings is realized by libraries in the purchase of large collections, series, or journal sets in microform, e.g. the cost per volume of a journal is at least two or three times more in paper reprints than in microform. Microforms also eliminate substantial binding and preservation costs, as well as produce savings in shipping costs. The actual cost of microform is comparable (in the US) to the cost of binding the original issues. It must be remembered that a microfilm subscription does not generally replace a current subscription to a journal; it is in addition to the print subscription and becomes economical only when such costs as binding, storage, shipping, replacement, etc. are considered.

- c) Preservation; As shown by accelerated archival tests, microforms will far outlast the paper originals when subjected to similar conditions.
- d) Security; Microforms seldom leave the library because special equipment is required for their use. The danger of theft and/or mutilation is minimal. This results in maintenance of complete and intact files. If theft or other loss does occur, the replacement cost is low.
- e) Space Savings; Because of their reduction ratios, microforms have a very high storage density; microforms generally save 90 to 95% of the shelf space occupied by the same publication in paper form. Although this factor is often cited as the most important, it is not the most significant consideration for the IAAS Library at this time.

Equipment required to initiate a microform collection project at the IAAS Library is minimal. Newer microform equipment makes it possible to handle a variety of microform formats through a simple lens change or the use of an adapter. Any microform storage cabinets or readers purchased for the Library should be generally compatible with similar equipment used in the proposed Agricultural Communication Services Centre (ACSC). The technical expertise necessary to service and maintain the Library's equipment could then be provided by the ACSC. (I can not recommend the purchase of a microform reader/printer; to date, this piece of equipment is expensive to purchase, expensive to operate, and generally gives poor copies and unsatisfactory service.)

Proper storage conditions and a routine preventive maintenance program can help assure a long, trouble-free life for most microforms and their equipment. Simply using a dust cover when the equipment is not in use will help control a great portion of the dust problem. However, a routine program of

cleaning the screen, lens, mirrors, and condenser of the viewers must be established (perhaps in cooperation with ACSC) to assure better viewing conditions and a longer life of the microfilm or fiche. Scratching, one of the major problems with microforms, most commonly occurs when dirt and grit build up on the glass flats and the film is moved over the abrasive material. Films and fiche should be stored in sturdy cabinets where it is away from dust and sunlight. Rollfilm should remain in the individual boxes in which they are generally received. Fiche should also be filed in the acid-free envelopes in which they are generally received. These envelopes not only protect the fiche and keep it clean, but prevent sticking which can seriously damage the emulsion (Folcarelli and Ferragamo, pp. 711-725).

Microforms are available on three major types of film--silver halide, diazo, and vesicular.* I recommend purchase of the vesicular whenever the desired material is available on this film. However, if desired items are only available on silver halide film, certain storage conditions are necessary, according to the American National Standards Institute. The relative humidity should not exceed 40%, temperature should not exceed 70°F (21.5°C), and rapid cycling of temperature or humidity should be avoided. Silver film becomes brittle when subjected to low humidity--under 20%--for an extended period. The film will partially return to its original condition when the relative humidity goes back up, but this should not be depended on as common practice. Such low humidity is not likely to be a problem at IAAS. However, in areas where humidity exceeds 60% over extended periods, fungus growth is a

*Three other types of film have recently been introduced: 3M's heat-developing "Drysilver" film, Itek's RS film, and Photohorizons' "free radical" duplicating film. "Drysilver" film is used mainly for COM and data processing applications. RS and "free radical" films are new products and their utility for archival micro-publication applications has yet to be evaluated.

common problem with silver-gelatin film. An effective cleaning solution, Kinetreat PR, is available to remove dirt and retard fungus growth on silver film. (The American National Standards Institute has no adopted standards for storage of diazo or vesicular films.)

Although there are a number of materials available in microform, the greatest need, hence justification, for beginning a microform collection at the IAAS Library is the growing demand for an expanded research journal collection. There are 4 basic reasons to purchase journals in microform:

1. To acquire backruns of journals not available in the library,
2. To fill in missing volumes of a currently held title,
3. To replace damaged or mutilated volumes,
4. To create shelf space for monographs or bound journal volumes.

The basic microform formats currently in general use are:

1. 35mm rollfilm with approximately 3,000 pages per 100-foot reel,
2. a standard microfiche, containing 98 pages in microimages arranged in a grid pattern on a 4- by 6-inch flat sheet of exposed film.

The 35mm rollfilm is still the most common microform in libraries, especially for journal publications. The primary advantage of rollfilm remains strong--the availability of a large number of titles in this format.

However, microfiche has a number of advantages, accounting for its growing importance and availability. One is economy; although fiche is relatively expensive to produce initially, the cost of further fiche-to-fiche duplication is almost nominal. Also, fiche is a natural medium for interlibrary loan and international collection development purposes: the contents of an entire book or journal volume can be mailed at a cost equal to that of mailing a first class letter.

However, the greatest advantage of microfiche is related to its use. Unlike rollfilm, fiche lends itself naturally to the unit record, meaning that a smaller bibliographic unit of related information can be reproduced on one or two fiche. The unit format is ideal for individual journals or journal articles, reprints of book sections, technical reports, or even the entire contents of a short monograph (Folcarelli, Tannenbaum, et al., pp. 26-31).

Microfiche has also gained user acceptance (even preference) because it is generally easier and faster to retrieve a specific piece of needed information from fiche than rollfilm. (No more rolling through 99 feet of film to find the page you need!)

For all these reasons, plus personal preference based on users' experience, I recommend purchase of microfiche whenever the needed material is available in that format. Microfiche is an easy-to-use and relatively inexpensive library tool. Color microfiche is a recent technological breakthrough meeting many library needs, particularly for reference materials.

Recommendation 3.6/83: The Documentation Bank suggested in my 1979 report has been established at the IAAS Library, and is known as the Documentation Center. A critical need exists for the continued development and expansion of this Documentation Center, a unique collection of non-conventional literature* relating to applied agricultural research and various aspects of applied agricultural practices in Nepal. Since 1978, APROSC has collected non-conventional resource conservation and rural development literature relating to agricultural policy, economics, statistics and planning in Nepal. Although these two non-conventional collections may sometimes prove

*Non-conventional literature is variously known as "informally published", "unpublished" and "grey" literature. A portion of it is commonly called "report literature" (Baulkwill and Fosnett, p. 501). Also, what is sometimes referred to as "ephemeral material" may be included.

redundant, any overlap will only increase the probability of previously fugative literature being collected, organized and accessible to agricultural researchers and policy makers for Nepal.

The basic goal of the IAAS Documentation Center will remain the same as that outlined in my 1979 report, "...to identify and obtain...technical and research reports issued within Nepal by various ministries, teaching and research institutions, as well as those reports issued by international agricultural development programs and organizations inside or outside Nepal, pertinent to applied agricultural practices and research in Nepal" (p. 13). As pointed out in both the WU P'I report and the Wilson/Sofranko review, the Documentation Center could also function as a depository for IAAS course outlines, syllabi, curriculum reports, research proposals, outside reviews, faculty papers and reports, even software programs. In short, the purpose and usefulness of the Documentation Center should be strengthened by including donor reports, outside reviews, and materials resulting from faculty research, classroom teaching and curriculum development at IAAS.

Baulkwill and Posnett state that "non-conventional literature is consistently undervalued" (p. 502) and "non-conventional literature forms a higher proportion of the total output (of printed information) in developing countries than it does in developed countries" (p. 504). Important descriptions of the nature of non-conventional agricultural literature have been made by Wood (1974) and Mei (1975) and for non-conventional scientific literature in general by Holloway, et al. (1976).

Using adaptations from these various reports, Baulkwill and Posnett (p. 504) were able to identify common characteristics of non-conventional agricultural literature.

TYPES OF NON-CONVENTIONAL AGRICULTURAL LITERATURE

Material always considered non-conventional

Confidential reports of all kinds
Consultancy reports
Internal reports of organizations
Unprocessed records
Unpublished survey reports
Unpublished experimental reports
Material of limited distribution

Material sometimes considered non-conventional

Annual or periodic reports
Numbered but irregular series
Bulletins and pamphlets (e.g.
extension material) with a
fairly wide distribution within
a very limited area

SOURCES OF NON-CONVENTIONAL AGRICULTURAL LITERATURE

Originating authorities considered to be almost without exception sources of non-conventional literature

Consultants
Commercial development agencies

Originating authorities often found to be sources of non- conventional literature

Government Departments
Quasi-governmental organizations,
"statutory bodies"
International aid-giving agencies,
including banks
Information processing centres
Universities
Research Stations
Conferences

A common reason for producing non-conventional literature is to issue results quickly, often by simple and inexpensive in-house printing rather than by the more traditional journal or book publishing channels. Thus, rapid publication is often a feature of non-conventional literature; however, this same characteristic results in limited copies produced by numerous sources of supply and each source supplying a very small percentage of the total volume of the non-conventional literature. The inaccessibility of non-conventional literature is notorious throughout the world, and perhaps its most significant characteristic. This literature often represents many man-hours of careful study and data collection relevant to the agriculture of developing countries; yet much of this important and valid information rarely appears in conventional book or journal form.

An AGRIS Study Team (FAO Report No. AGRIS 16, 1974) estimated that approximately 20,000 non-conventional documents were produced each year on "agriculture and related subjects." The Study Team's estimate is probably very conservative for today's rate of production of these materials.

Baulkwill and Posnett found in their 1978 study of the Land Resources Division (LRD) Library of the Ministry of Overseas Development, England, that 39% of the LRD serial holdings--excluding annual reports--were non-conventional. They also illustrated the value of non-conventional literature by documenting the high-percentage of citations, particularly in the literature of resource assessment and development planning, that referred to non-conventional literature sources. It is especially interesting to note that in the Land Resources Division's final report on its Nepal Project (Berry, et al., 1974), it was found that the documents cited were 54% non-conventional.

All of the above emphasizes the importance of continued development and expansion of the IAAS Documentation Center. The real value of the Documentation Center will be more fully realized by both faculty and students in the near future as more emphasis is given applied research at IAAS. The Documentation Center will provide unique background materials for development of research proposals, offer additional information during the life of research projects, and provide a depository for research reports--providing background information and data for future researchers.

It would be inaccurate to assume a high rate of use per item in the IAAS Documentation Center; Wood (1974) asserted that the rate of use per item in such a collection was low. Nevertheless, its importance to the few users was very great! Therefore, the collection and organization of non-conventional literature is not an easy task, but a Documentation Center of such materials will undoubtedly prove itself one of the IAAS Library's most valuable--if not most used--resources. As recommended in my previous report and referred to

earlier in this report (see Recommendation 2.2/83), the further development, identification, collection and organization of non-conventional materials for the Documentation Center will require additional staffing in the IAAS Library.

4. LIBRARY SERVICES:

Once major administrative and staffing changes have been implemented, a Collection Development Policy has been established, and the research journal and Documentation Center collections have been strengthened, attention turns to improving library services. The purpose of expanding services is to encourage effective utilization of the available IAAS Library resources by faculty and students, as well as others associated with agricultural development in Nepal. All of the service recommendations made in the 1979 report are still valid and worthy of attention. However, several of those recommended projects are deserving of special attention.

Recommendation 4.1/83: A great deal of the Library's resources (both staff and monies) need to be channeled to the establishment of a ready-reference collection. Such a collection allows staff and users to answer factual and other "quick reference" questions (e.g. "How much X is produced annually in Y?", "What is the average annual rainfall in XYZ?", or "What is the address of ABC?") Appendix D of this report is a selected listing of appropriate materials for establishing such a reference collection at IAAS.

In addition to the suggested titles, indexing and abstracting services need to be added to the reference collection as the research journal collection grows. Indexing and abstracting services allow organized access to the information available in journals and other research publications.

Recommendation 4.2/83: A Reserve Collection Policy and a reserve collection, as defined in my 1979 report, still need to be implemented. In addition to the advantages listed previously, a reserve collection, if understood

and properly used by the teaching faculty, has the advantage of encouraging students to use the Library's resources in a manner related to their classroom and laboratory experiences. This aspect underscores the importance of the librarian(s) working closely with the teaching and research faculty, resulting in the faculty better knowing and understanding the Library's resources and services and the librarian(s) being better prepared to offer needed services to meet users' needs. A Library Committee, primarily composed of faculty administrators, does exist. However, the current main function of this group is to approve library acquisitions. As stated in my earlier report, the librarian(s) should cultivate the Library Committee and use it as a tool for communicating needs and services of the Library and for gathering information regarding felt needs of the users.

Recommendation 4.3/83: A service now feasible at the IAAS Library is development of in-house databases useful to the Library staff, the Library's users, the proposed IAAS Library System, or anyone needing bibliographic information regarding agricultural research and development in Nepal. The primary purpose of the proposed databases is to provide easy and efficient access to up-to-date information regarding the IAAS Library's resources.

At the time of my site visit, the IAAS had one Apple II Plus microcomputer housed in the Library building. P.P. Sharma was attending a 3-month microcomputer training course at Michigan State University, and was expected to return with a second Apple microcomputer for the Institute. Consideration was being given to also purchasing an IBM PC. This results in one microcomputer, and perhaps more, being readily available in the Library and at least one individual trained in its use.

Microcomputers serve many functions in today's libraries. In the IAAS Library, three organizational and record-keeping functions are immediately

apparent for effective transfer to microcomputers using currently available information management software:

- 1) the serials check-in file (the Kardex) can be converted to a Serials Holdings Database,
- 2) the Documentation Center catalog can be converted to a Documentation Center Database,
- 3)* the current card catalog can be converted to an Online Catalog Database.

Any database management software providing indexing and retrieval capabilities should meet the needs of the above functions; Condor, dBASE II or R:Base are three possibilities, and there are many more. (See "International Inventory of Software Packages in the Information Field.")

Of the three library operations listed, the Serials Holdings Database is probably the most straight forward in terms of initial development and input. All title and holdings information is currently available in the serials check-in record (the Kardex); therefore, the necessary input data are readily available.

The desired printout display need only include journal title and holdings information, plus notation fields for special information, e.g. supplements, titles or vols. held in microform, etc. The most common display arrangement for lists such as this is alphabetical by title, with the title being the only searchable field.

The holdings information would be a record of volume numbers and years that the Library's holdings begin and end for each title. For example:

Vol. 18 (1965) - Vol. 22 (1970)

*Another possible database, indirectly associated with the Library, would be an inventory of agriculture-related research projects underway at IAAS or throughout Nepal. Besides serving the needs of IAAS itself, the inventory would also provide input to the CARIS (Current Agricultural Research Information System) program of FAO.

would indicate the Library has all volumes of the title from #18 (dated 1965) through #22 (dated 1970).

An entry such as:

Vol. 18 (1965) - Vol. 22 (1970); Vol. 25 (1973) - Vol. 28 (1976)
would indicate the Library owns volume 18 through volume 28, but is lacking volumes 23 and 24. (If those volumes were later acquired on microform, a notation would be added such as: Vol. 23 (1971) & Vol. 24 (1972) on microfiche.)

An open entry indicates a current subscription. For example:

Vol. 18 (1965) -

would mean the Library has this title from volume 18 to the present.

There are variations on the above themes, such as incomplete volumes, missing issues, supplements, bound and unbound volumes; Devkota seems to be aware of the standard library formats for serial holdings entries and could serve as a resource person for developing this database.

Printouts--an alphabetical title listing of all serial holdings--would be merged and updated at regular intervals and available in the Library for staff and users alike, and could be readily distributed throughout campus to departmental and faculty offices for quick and easy reference. An annual update of the Serials Holdings printout would probably be sufficient, indicating new subscriptions added, subscriptions closed (cancelled or ceased), gifts added to the collection, etc. A printout could also serve as the archival record of non-current titles, and the paper records removed from the Kardex. Only journal titles currently received need to be kept in the Kardex for purposes of checking-in received issues and claiming missing issues.

A Documentation Center Database would initially be somewhat more complicated to develop and would require more storage space on the microcomputer.

There would be at least 5 fields of entry:

Main Entry (author)
 Title
 Date of Publication
 Subject (at least two per record)
 Call Number

All fields except date would have to be searchable; limitation by date would be useful and truncation for keyword searching should be feasible.

The current Documentation Center catalog contains at least three typed cards per title: one for main entry or author (more cards if more than one author); one for title; and one per subject entry (each additional subject entry requires a typed card). On the other hand, typing the record once into the proposed Documentation Center Database would service all searchable functions.

Initial input to the database would be taken from the main entry (author) cards. Once a clean printout is available the current main entry (author), title, and subject catalog can be abandoned and discarded. Only a temporary main entry (author) card file would be maintained for new titles added to the Documentation Center. Merged updates of the database would be at regular intervals, perhaps quarterly, with input information taken from the temporary main entry card file. At least one printout of the merged file would be available in the Documentation Center after each update--and the outdated typed main entry cards discarded, since there is no reason to keep incomplete card files once an updated and accurate printout is received.

For internal record keeping purposes, at least one copy of each merged update would have to be printed by subject in call number order--or the current handwritten Accession Register (the call number is basically an accession

number) would have to be kept. I recommend the elimination of as many paper records or files as possible once a database is operational and a clean print-out is available.

The Online Catalog Database would have requirements similar to those of the Documentation Center Database, only on a larger scale. The Documentation Center currently contains about 2500 unique entries; the card catalog contains an estimated 10,000 unique titles.

The fields of entry would be the same:

- Main Entry (author)
- Title
- Date of Publication
- Subject
- Call Number

All fields except call number should be searchable; a searchable call number might prove useful once in awhile, but would probably not be in high demand. A better idea of the needs and scope of an online catalog would be gained once a Documentation Center Database is developed and in use.

There exist a myriad of advantages within the Library for converting the above files to the microcomputer--ease of updating records, ease of access to updated files, elimination of paper files, conserving staff time, etc. There also exist a number of reasons outside the Library to develop the proposed databases, all bringing recognition to the role of the IAAS Library in the support and exploitation of agricultural research, development and production in Nepal.

As mentioned previously in this report, printouts can be distributed to various offices around the campus, making the Library more a part of the faculty and students' daily lives. Copies could also be distributed to the branch campuses, allowing the faculty and students there to become more aware of the IAAS Central Library's resources. If the proposed IAAS Library System

is implemented, the databases would include the branch campuses' library holdings as well. Hopefully, such an exchange of information would serve as a catalyst for development of interlibrary cooperation and a document delivery system.

There also exist throughout Nepal a number of institutions and governmental agencies that would be appropriate recipients of printouts from the proposed IAAS Library's databases, e.g. the Institute of Forestry, the Tribhuvan University Central Library, the HMG Agricultural Library and various ministries, UNDP, APROSC, RECAST, ICIMOD, perhaps the Peace Corps/Nepal, the British Council Library, the USAID/Nepal Library. The wide distribution of Library printouts, properly identified and dated, would serve a very useful public relations function--to IAAS as well as to the IAAS Library. As a consequence, if the IAAS Library is to be a leader not only in developing library databases in Nepal but in distribution of resource information throughout Nepal, the Institute as well as the IAAS Library should be prepared to actively participate in library network development projects, document delivery agreements, and interlibrary loan systems. Serious consideration must be given to the potential of the IAAS Library participating in shared resource library development throughout Nepal.

During my visits to various agriculture information sources in Nepal (see Appendix E), it became apparent that a number of small collections, several with overlapping materials and purposes, are being developed within the country by various external donors with little or no coordination or even communication. For the development of effective agriculture information sources and services in Nepal, it is essential that efforts be made to coordinate agricultural information networking, collection development efforts and resource sharing services.

5. THE PHYSICAL FACILITY:

As mentioned in several recent reports and reviews, the new library is among the most impressive buildings on the Rampur campus.

Recommendation 5.1/83: However, current and future maintenance of the facility is a great concern; not only the monies for maintenance but maintenance practices.

Recommendation 5.2/83: Space utilization within the Library should be reviewed, with special consideration given to identifying locations for: a microform center; a reserve collection; the ready-reference collection; and an expanding Documentation Center.

Recommendation 5.3/83: Relocation of the second floor conference room should be considered; the present location, resulting in an air conditioner operating inside the Library, is unsatisfactory.

Recommendation 5.4/83: Current furniture needs include: 3 or 4 additional display units for current journal issues; approximately 12 more metal bookcases with doors for the journal collection; and 3 or 4 additional metal bookstacks for the proposed ready-reference collection.

Recommendation 5.5/83: It was suggested to me on several occasions that space is sufficient for the Library to serve as an arts and cultural hub of the campus. Some of the available wall space could be used for murals, etc., and presently unused floor space could be made available for art or handicraft shows. Exhibit cases currently exist; these could be used effectively by various departments, clubs, etc. I pass on these suggestions with the caveat that the space be available for such purposes until the Library needs the floor space for expanding resources and services.

6. SUMMARY:

The IAAS is a nascent applied-agriculture teaching and research institution. This report offers a number of recommendations and proposals for library development to keep pace with emerging changes in instructional and research priorities. The development of curricula, the establishment of research incentives and the scholarly review of research proposals, combined with the evolution of a faculty evaluation system including research and publication activities as well as teaching and extension roles, will lead to increased dependence on and use of the IAAS Library and its resources.

Critical needs currently exist for improvements in the identification, collection, organization and dissemination of agriculture-related information within Nepal. The established Documentation Center is one example of achieving limited bibliographic control of part of this information. The proposed Agricultural Communication Services Centre (ACSC) offers great potential for playing a significant role in the dissemination of agricultural information throughout Nepal. From the perspective of efficiency, it is important that the IAAS Library and the ACSC work in close cooperation and communication, sharing responsibilities and resources to assure maximum effectiveness in the achievement of their respective goals. The ability of these two campus operations to develop and work in a complementary and synergetic relationship will influence the success of each operation and the IAAS as a viable applied agriculture research institution. If cooperation is successfully achieved, the IAAS Library/ACSC operation could logically expand to become a comprehensive agriculture-related information databank supplying badly needed assistance in the effective "transfer of technology" from the scientific sector to the farming sector of Nepal. Working in tandem, the IAAS Library and the ACSC could not only serve the policy making, research, teaching and extension needs

of the IAAS and the agricultural community of Nepal, but also play an active role in transferring the results of applied agricultural research to the level of the farmer in the field.

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1. Advances in Agronomy*
2. Agronomy Journal*
3. American Journal of Agricultural Economics*
4. American Journal of Sociology*
5. Annals of the Entomological Society of America*
6. Annual Review of Entomology*
7. Annual Review of Plant Physiology*
8. Bibliography of Agriculture*
9. CERES FAO Review on Agriculture and Development*
10. Crop Science*
11. Economic Development and Cultural Change*
12. Environmental Entomology*
13. Farmer and Parliament
14. Fertilizer News (India)
15. Haryana Farming
16. HortScience*
17. Indian Farming
18. Indian Farmer's Digest
19. Indian Horticulture
20. The Indian Journal of Agricultural Economics
21. The Indian Journal of Agricultural Science
22. The Indian Journal of Agronomy
23. The Indian Journal of Animal Science
24. The Indian Journal of Entomology
25. The Indian Journal of Extension Education
26. The Indian Journal of Genetics and Plant Breeding

*Current Subscription Paid By MUCIA

JOURNAL (SERIAL) TITLES CURRENTLY RECEIVED BY THE IAAS LIBRARY (con't)

27. The Indian Journal of Horticulture
28. Indian Phytopathology
29. The Indian Poultry Gazette
30. Indian Society of Soil Science
31. Journal of the American Society for Horticulture Science*
32. Journal of Animal Science*
33. Journal of Dairy Science*
34. Journal of Economic Entomology*
35. Journal of Extension*
36. Journal of Nematology*
37. Journal of Nutrition*
38. Journal of Soil and Water Conservation*
39. Kheti
40. Kisham Bharati
41. Mycologia*
42. National Geographic*
43. Nutrition Abstracts and Reviews
Sec. B--Livestock Feed and Feeding*
44. Pesticides (India)
45. Phytopathology*
46. Plant Physiology*
47. Plant Protection Bulletin*
48. Poultry Science Journal*
49. Rural Development Abstracts*
50. Rural Extension, Education and Training Abstracts*

*Current Subscription Paid By MUCIA

JOURNAL (SERIAL) TITLES CURRENTLY RECEIVED BY THE IAAS LIBRARY (con't)

51. Rural Sociology*
52. Soil Science*
53. Soil Science Society of America Journal*
54. Soils and Fertilizers*
55. Transactions of the American Society for Agricultural Engineers*
56. World Farming*

*Current Subscription Paid By MUCIA

ENGLISH-LANGUAGE JOURNALS & SERIALS IN THE AGRICULTURAL SCIENCES
SUGGESTED FOR THE IAAS LIBRARY COLLECTION

Note: Library materials are subject to rapid cost fluctuations; annual subscription prices, when available, are included only to provide guidelines for budgeting purposes.

Primary Indexing and Abstracting Services

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"The Bibliography of Agriculture and CAB abstracting journals offer extensive coverage of the agricultural serial literature, suitable for use by researchers and scholars, advanced undergraduate and graduate students. Both list references to journal articles written in many languages. Citations to proceedings, annual reports, pamphlets, government publications, special reports, and experiment station and extension publications are also included.

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Animal Feed Science and Technology. Quarterly. Associated Scientific Publishers, Journals Division, P.O. Box 211, 1000 AE Amsterdam, The Netherlands.

Animal Production. Bimonthly. \$67.00. The Longman Group, Journals Division, 43/45 Annandale Street, Edinburgh EH7 4AT, United Kingdom.

Annals of Applied Biology. Quarterly. Association of Applied Biologists, 200 Euston Road, London N.W. 1, England.

Annual Review of Entomology. 1956-- . \$17.00. Annual Reviews, Inc., 4139 El Camino Way, Palo Alto, CA 94306. ISSN 0066-4170.

Annual Review of Phytopathology. 1963-- . \$17.00. Annual Reviews, Inc., 4139 El Camino Way, Palo Alto, CA 94306. ISSN 0066-4286.

Appropriate Technology. Quarterly. \$12.00. Intermediate Technology Publications, Ltd., 9 King Street, London WC2E 8HN, United Kingdom.

Bio-Energy Newsletter. Quarterly. Membership. Bio-Energy Council, 1337 Connecticut Ave., NW, Suite 204, Washington, DC 20036.

Bioscience. Monthly. \$37.00. The American Institute of Biological Sciences, 1401 Wilson Blvd., Arlington, Virginia 22210.

British Poultry Science. Bimonthly. \$60.00. The Longman Group, Ltd., 43/45 Annandale St., Edinburgh EH7 4AT, United Kingdom.

Bulletin of Veterinary Health and Animal Husbandry: Nepal. Irregular. Nepal Veterinary Association, G.P.O. Box 1885, Kathmandu.

Canadian Agricultural Engineering. 1959-- . Semi-Annual. \$9.00. Suite 907, 151 Slater St., Ottawa, Ontario K1P 5H4, Canada. Editor: E.B. Moysey.

Canadian Journal of Agricultural Economics. 1953-- . 5 issues/year. \$25.00. Canadian Agricultural Economics Association, Suite 907, 515 Slater Street, Ottawa, Ont., K1P 5H4 Canada.

Canadian Journal of Forest Research/Journal Canadien de la Recherche Forestiere. 1971-- . Quarterly. \$40.00. (Also available on microfilm.) The National Research Council of Canada, Ottawa, Ont. K1A 0R6 Canada. ISSN 0045-5067.

Crop Science. 1961-- . Bimonthly. \$22.00. Crop Science Society of America, 677 S. Segoe Rd., Madison, WI 53711. ISSN 0011-183X.

Crops and Soils Magazine. 1966-- . 9 issues/year. \$7.00. American Society of Agronomy, 677 S. Segoe Rd., Madison, WI 53711. ISSN 0162-5098.

Dairy Goat Journal. Monthly. \$17.00. Dairy Goat Journal, Box 1808, Scottsdale, Arizona 85252.

Selected Research Journals & Serials (con't)

Dairy Industries International. Monthly. United Trade Press, Ltd.,
33/35 Bowling Green Lane, London EC1R ODA, United Kingdom.

Ecology. Bimonthly. \$44.00. Duke University Press, Box 6697, College
Station, Durham, North Carolina 27708.

Economic Botany. Quarterly. \$27.00. Publications Office, The New York
Botanical Garden, Bronx, New York 10458.

Economic Planning Journal for Agriculture and Related Industries.
Bimonthly. \$8.00. Academic Publishing Co., P.O. Box 42, Snowdon Station,
Montreal 26, Canada.

Entomological Society of America. Annals. 1908-- . Bimonthly. \$34.50
non-members. Entomological Society of America, 4603 Calvert Road,
College Park, MD 20740. ISSN 0013-8746.

Environmental Entomology. 1972-- . Bimonthly. \$34.50 non-members.
Entomological Society of America, 4603 Calvert Road, College Park, MD 20740.
ISSN 0046-225X.

Environmental Science and Technology. Monthly. \$70.00. American
Chemical Society, Office of the Controller, 1155 16th St., N.W., Washington,
D.C. 20036.

European Review of Agricultural Economics. 1973-- . Quarterly. \$58.00.
Mouton Publishers, Noordeinde 41, 2514GC, The Hague, Netherlands. ISSN
0165-1587.

Experimental Agriculture. Quarterly. Oxford University Press, London,
England. (Supersedes: Empire Journal of Experimental Agriculture)

Extension Service Review. Monthly. Cooperative Extension Service, U.S.
Department of Agriculture, Washington, D.C. 20250.

FAO Plant Protection Bulletin. Monthly. FAO, Via delle Terme di
Caracalla, 00100 Rome, Italy.

Field Crops Research. Quarterly. \$64.00. Associated Scientific
Publishers, P.O. Box 211, Amsterdam, The Netherlands.

Food and Nutrition. 1971-- . Bimonthly. \$5.00. U.S. Department of
Agriculture, Food and Nutrition Service, Washington, DC 20250. Distributed
by Supt. of Documents, Govt. Printing Office, Washington, DC 20402. Editor:
Jan Kern. ISSN 0364-8944.

Food and Nutrition. 1975-- . Semi-Annual. \$6.50. Food and Agriculture
Organization of the United Nations, Via delle Terme di Caracella 1-00100 Rome.
Distributed by Unipub, 345 Park Avenue South, New York, NY 10010. Editor:
R.H. Forster.

Selected Research Journals & Serials (con't)

Food Technology. 1947-- . Monthly. Non-members \$40.00. Institute of Food Technologists, 221 N. La Salle St., Chicago, IL 60601. Editor: John B. Klis. ISSN 0015-6639. (Available on microfilm from UMI.)

Forest Products Journal. 1947-- . Monthly. \$60.00. (Also available on microfilm.) Forest Products Research Society, 2801 Marshall Court, Madison, WI 53705. ISSN 0015-7473.

Forest Science. 1955-- . Quarterly. \$34.00/foreign institutions. Society of American Foresters, 5400 Grosvenor Lane, Washington, D.C. 20014.

Forestry. Quarterly. \$30.00. The Oxford University Press, Journals Manager, Press Road, Neasden, London NW10 0DD, England.

Grass and Forage Science. (formerly: British Grassland Society Journal) Quarterly. Blackwell Scientific Publications, Ltd., Osney Mead, Oxford OX2 0EL, United Kingdom.

Genetics. Monthly. \$54.00. Genetics Business Office, P.O. Drawer "U", University Station, Austin, Texas 78712.

Horticultural Research. Semi-Annual. Oliver & Boyd, Ltd., Tweeddale Court, 14 High Street, Edinburgh, Scotland.

HortScience, 1966-- . Bimonthly. \$34.00/foreign. American Society for Horticultural Science, 701 N. Saint Asaph St., Alexandria, VA 22314. Editor: Jules Janick.

Indian Journal of Agricultural Sciences. Quarterly. Indian Council of Agricultural Research, New Delhi, India.

Indian Journal of Agronomy. Quarterly. Indian Society of Agronomy, New Delhi, India.

Indian Journal of Genetics and Plant Breeding. 3 times a year. Indian Society of Genetics and Plant Breeding, New Delhi, India.

Indian Journal of Nutrition and Dietetics. Sri Avinashilingam Home Science College, Coimbatore, India.

Journal of Agricultural Economics. 3 times a year. Centre for European Agricultural Studies. Wye College, Ashford, Kent, TN25 5AH, England.

Journal of Agricultural Economics and Development. Semi-Annual. \$10.00. Business Manager, c/o Department of Agricultural Economics, Institute of Agricultural Development and Administration, U.P. at Los Banos College, Laguna, The Philippines.

Selected Research Journals & Serials (con't)

Journal of Agricultural Engineering Research. 1956-- . Quarterly. \$65.00. (British Society for Research in Agricultural Engineering.) Academic Press Inc. (London) Ltd., 24-28 Oval Road, London NW170X, England. (U.S. address: 111 Fifth Avenue, New York, NY 10003) Editor: Dr. D.J. White. ISSN 0021-8634.

Journal of Agricultural Science. Bimonthly. \$95.00. Cambridge University Press, P.O. Box 110, Cambridge CB2 3RL, England.

Journal of Animal Science. 1942-- . Monthly. \$55.00. American Society of Animal Science, 311 Illinois Bldg., 113 N. Neil St., Champaign, IL 61820. Editor: Wilson Pond. (Also available in microform from UMI.)

Journal of Dairy Research. 3 times a year. Cambridge University Press, London, England.

Journal of Dairy Science. Monthly. \$30.00. American Dairy Association, 113 North Neil Street, Champaign, IL 61820.

Journal of Economic Entomology. 1908-- . Bimonthly. \$34.50 non-members. Entomological Society of America, 4603 Calvert Road, College Park, MD 20740. ISSN 0022-0493.

Journal of Food Science. 1936-- . Bimonthly. \$50.00. Subscription Department, Institute of Food Technologists, Suite 2120, 221 N. La Salle Street, Chicago, IL 60601. ISSN 0022-1147.

Journal of Forestry. 1902-- . Monthly. \$30.00. Society of American Foresters, 5400 Grosvenor Lane, Washington, D.C. 20014.

Journal of General Virology. Monthly. \$245.00. The Cambridge University Press, P.O. Box 110, Cambridge CD2 3RL, England.

Journal of Heredity. Bimonthly. \$25.00. American Genetic Association, 1028 Connecticut Ave., N.W., Washington, D.C. 20036.

Journal of Horticultural Science. Quarterly. \$60.00. Headly Brothers, Ltd., The Invicta Press, Ashford, Kent, England.

Journal of Nematology. 1969-- . Quarterly. \$18.00. Society of Nematologists, c/o Dr. R.S. Hussey, Department of Plant Pathology, University of Georgia, Athens, GA 30602. ISSN 0022-300X.

Journal of Nutrition Education. 1969-- . Quarterly. \$25.00. Society for Nutrition Education, 2140 Shattuck Ave., Berkeley, CA 94701. Editor: Susan M. Oace. ISSN 0022-3182.

Journal of Peasant Studies. 1973-- . Quarterly. \$47.50. Frank Cass and Co., Ltd., Publishers, Gainsborough House, 11 Gainsborough Rd., London E11 1RS, England. Editors: T.J. Byres, C.A. Curwen.

Selected Research Journals & Serials (con't)

Journal of Range Management. Bimonthly. \$25.00. Managing Editor, 2760 West Fifth Avenue, Denver, CO 80204.

Journal of Soil and Water Conservation. Bimonthly. \$25.00. Soil Conservation Society of America, 7515 N.E. Ankeny Road, Ankeny, IA 50021.

Journal of Soil Science. Quarterly. \$50.00. British Society of Soil Science, Oxford University Press, Press Road, Neasden, London NW10 ODD, England.

Journal of the American Dietetic Association. 1925-- . Monthly. \$24.00. American Dietetic Association, 430 N. Michigan Ave., Chicago, IL 60611. Editor: Dorothea F. Turner. ISSN 0002-8223.

Journal of the American Society of Farm Managers and Rural Appraisers. 1937-- . Semi-Annual. \$8.00. American Society of Farm Managers and Rural Appraisers, P.O. Box 6857, Denver, CO 80206.

Journal of the American Society for Horticultural Science. Bimonthly. Business Manager, American Society for Horticultural Science, Mount Vernon, VA 22121.

Journal of the American Veterinary Medical Association. Semi-monthly. \$40.00. American Veterinary Medical Association, 930 N. Meacham Road, Schaumburg, IL 60196. (Available in microform from UMI.)

Journal of the Science of Food and Agriculture. Monthly. \$175.00. Blackwell Scientific Publications, Osney, Mead, Oxford OX2 OEL, England.

Land Economics. 1925-- . Quarterly. \$25.00. University of Wisconsin Press, Box 1379, Madison, WI53706. ISSN 0023-7639.

Livestock International. Bimonthly. \$15.00. World Crops Publications, Ltd., 36 Wellington Street, London WC2E 7BD, England.

Livestock Production Science. Quarterly. \$93.00. Elsevier Scientific Publishing Co., Journals Division, P.O. Box 211, Amsterdam, The Netherlands.

Malaysian Agricultural Journal. 2 times a year. Ministry of Agriculture and Rural Development, Kuala Lumpur, Malaysia.

Meat Science. Quarterly. \$50.00. Applied Science Publishers, Ripple Road, Barking, Essex, England.

Nematologica. Quarterly. International Journal of Nematological Research, Dr. P. van der Laan, Marterlaan 18, Bennekom, The Netherlands.

Nutrition and Food Science. (Formerly Review of Nutrition and Food Science.) 1966-- . Bimonthly. \$30.00. Forbes Publications, Ltd., Hartree House, Queensway, London W24S11. Editor: Dilys Wells. ISSN 0034-6659.

Selected Research Journals & Serials (con't)

Nutrition Today. 1966-- . Bimonthly. \$14.75/membership. Nutrition Today, Inc., 703 Giddings Avenue, P.O. Box 1829, Annapolis, MD 21404. Editor: Cortez F. Enloe, Jr. ISSN 0029-666X.

Pesticide Science: A Journal of International Research and Technology on Crop Protection and Pest Control. 1970-- . Bimonthly. \$135.00. Blackwell Scientific Publications Ltd., Osney Mead, Oxford OX2 OEL, England. ISSN 0031-613X.

Phytopathology, an International Journal. 1911-- . Monthly. \$100.00. American Phytopathological Society, 3340 Pilot Knob Road, St. Paul, MN 55121. ISSN 0031-949X.

Plant and Soil. Quarterly. \$130.00. Martimes Nijhoff, 9-11 Lange Voorhout, P.O. Box 269, The Hague, The Netherlands.

Plant Disease: An International Journal of Applied Plant Pathology. (Formerly Plant Disease Reporter.) 1980-- . Monthly. \$60.00. American Phytopathological Society, 3340 Pilot Knob Road, St. Paul, MN 55121. ISSN 0191-2917.

Plant Pathology. Quarterly. \$20.00. Her Majesty's Stationery Office, 49 High Holborn, London WC1C 6HB, England.

Plant Physiology. Monthly. \$110.00. American Society of Plant Pathologists, 9650 Rockville Pike, Bethesda, Maryland 20014.

Plant Propogator. Quarterly. Dr. William F. Snyder, Secretary/Treasurer, International Plant Propogators' Society, P.O. Box 3131, Boulder, Colorado 80307.

Poultry Digest. Monthly. \$18.00. Watt Publishing Company, Mount Morris, Illinois 61054.

Poultry Science. 1908-- . Bimonthly. \$35.00. Poultry Science Association, 113 N. Neil St., Champaign, IL 61820.

Rural Sociology. 1936-- . Quarterly. \$20.00/members; \$28.00/non-members. The Treasurer, The Rural Sociological Society, 325 Morgan Hall, University of Tennessee, Knoxville, TN 37919. Editor: Stan L. Albrecht. ISSN 0036-0112.

Seed Science and Technology. Quarterly. International Seed Testing Association, ISTA--Secretariat, Reckenholz, P.O. Box 412, CH-8046 Zurich, Switzerland.

Small Farm Energy Project Newsletter. Irregular. Free. Center for Rural Affairs, Box 735, Hartington, NE 68739.

Society of Dairy Technology Journal. Quarterly. Society of Dairy Technology, 172A Ealing Road, Wembley, Middlesex HA0 4QD, England.

Selected Research Journals & Serials (con't)

Sociologia Ruralis. 1960-- . Quarterly. \$43.00. Van Gorcum Ltd., P.O. Box 43, 9400 AA Assen, The Netherlands. Editor: Anton J. Jansen. ISSN 0038-0199.

Sociology of Rural Life. 1978-- . Quarterly. Free. Editor, Rural Sociology, Class Room Office Building, 1994 Buford Ave., University of Minnesota, St. Paul, MN 55108. Editor: P.J. Tichenor. ISSN 0544-2885.

Soil Science. 1916-- . Monthly. \$55.00. Williams and Wilkins Co., 428 E. Preston St., Baltimore, MD 21202. ISSN 0038-075X.

Soil Science and Plant Nutrition. Quarterly. \$46.00. Japan Publications Trading Co., Ltd., P.O. Box 5030 Tokyo International, Tokyo, Japan.

Soil Science Society of America Journal. 1976-- . Bimonthly. \$22.00. Soil Science Society of America, 677 S. Segoe Rd., Madison, WI 53711. ISSN 0361-5995.

Soybean Digest. Monthly. \$65.00. American Soybean Association, P.O. Box 27300, St. Louis, MO 63141.

Tropical Agriculture. 1924-- . Quarterly. \$104.00. I.P.C. (Sales & Distribution), Ltd., Oakfield House, Perrymount Road, Haywards Heath, Sussex, RH16 3DH, England. ISSN 0041-3224.

Tropical Animal Production. 1976-- . Quarterly. Prices vary. Center for Tropical Animal Production, School of Veterinary Science, University of Yucatan, Apartado Postal 116-D, Merida, Yucatan, Mexico. ISSN 0041-4271.

Tropical Animal Health and Production. 1969-- . Quarterly. \$64.00. Longman Group Ltd., Journal Division, Fourth Avenue, Harlow, Essex, CM19 5AA, England. ISSN 0253-4851.

Tropical Pest Management (formerly PANS). 1971-- . Quarterly. \$50.00. Centre for Overseas Pest Research, College House, Wrights Lane, London W8 5SJ, England. ISSN 0364-202X.

UNASYLVA: An International Review of Forestry and Forest Products. 1947-- . Quarterly. \$10.00. Distribution and Sales Section, FAO, Via delle Terme de Caracalla, 00100 Rome, Italy. (Also available in microfiche.)

Veterinary Record. 1888-- . Weekly. \$128.00. British Veterinary Association, 7 Mansfield St., London W1M 0AT, England. (Also available in microform from UMI.)

Virology. Monthly. \$65.00. Academic Press, Inc., 111 Fifth Avenue, New York, NY 10003.

Water International. Quarterly. \$30.00. International Water Resources Association, P.O. Box 34434, Washington, D.C. 20034.

Selected Research Journals & Serials (con't)

Weed Research. Bimonthly. \$80.00. Blackwell Scientific Publishers, Osney Mead, Oxford OX2 OEL, England.

Weed Science. 1952-- . Bimonthly. \$25.00. Weed Science Society of America, 309 West Clark Street, Champaign, IL 61820. ISSN 0043-1745.

Weeds Today. Quarterly. \$5.00. Weed Science Society of America, 309 West Clark Street, Champaign, IL 61820.

Wood Science and Technology. Quarterly. \$100.00. Springer-Verlag, 175 Fifth Avenue, New York, NY 10010.

World Animal Review. Dates of publication vary. Prices vary. FAO, Via delle Terme de Caracalla, 00100 Rome, Italy.

World Crops: The International Journal of Agriculture. Monthly. The Tower, Shepherds Bush Road, Hammersmith, Riverside 3071, London W.6, England.

Primary Sources Consulted: Eleanor Mathews, "'When Tillage Begins, Other Arts Follow...' A Core List of Agriculture Serials." Serials Review 7(1981): pp. 9-43; Lendvay's Primer for Agricultural Libraries, Appendix IX, 1980; and my own Primary Journal's of the Agricultural Sciences, 1980.

APPENDIX C

MAJOR U.S. MICROPUBLISHERS

Bell & Howell Company
Microimagery Group
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Chicago, Illinois 60645

Educational Resources Information Center (ERIC)
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Microfilm Publishing Inc.
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300 N. Zeeb Road
Ann Arbor, Michigan 48106

AN ILLUSTRATIVE LISTING OF READY-REFERENCE MATERIALS
SUGGESTED FOR THE IAAS LIBRARY

Note: Library materials are subject to rapid cost fluctuations; prices, current at the time of compilation, are included when available only to provide general guidelines for budgeting purposes.

Selected First-Priority Titles

Primer for Agricultural Libraries. Olga Lendvay. 2nd edition, revised and enlarged. 1980. PUDOC 97 p. Unipub. Order no. PDC 165, paper. \$9.00 ISBN 90-220-0727-8

Guide to Sources for Agricultural & Biological Research. Edited by J. Richard Blanchard and Lois Farrell. 672 p. Univ. of Calif. Pr. 1981. \$47.50. ISBN: 0-520-03226-8

Akers' Simple Library Cataloging. 7th edition. Completely revised and rewritten by Arthur Curley and Jana Varlejs. Metuchen, N.J.: Scarecrow Press, 1984. \$15.00. ISBN 0-810-81649-0

Agricode for Agricultural Libraries: Code for the Classification of Agricultural Literature, with Index. F.A. Koekenbakker, Editor. Pub. by PUDOC. Unipub order no. PDCI. 1977. \$36.00. ISBN 90-220-0567-4.

Handbook for AACR: Explaining & Illustrating the Anglo-American Cataloging Rules, 2nd ed. Margaret Maxwell. 700 p. ALA. paper. \$20.00. ISBN 0-8389-0301-0.

Dewey Decimal Classification & Relative Index, 19th ed. Melvil Dewey. 3 vols. 2692 pp. Forest Pr. 1980(?). \$60.00(?).

CAB Thesaurus. 1983. G. Eric Tidbury, compiler. 2 vols. 1200 pp. \$105.00. ISBN 0-85198-540-8. Publisher: Commonwealth Agricultural Bureaux, Farnham House, Farnham Royal, Slough, SL 2 3BN, United Kingdom.

Agrovoc: a Multilingual Thesaurus of Agricultural Terminology: English Version. Donald Leatherdale. 1982. 529 pp. Apimondia. ISBN 88-7643-001-6.

Sears List of Subject Headings, 12th ed., Barbara M. Westby, editor. 624 pp. Wilson. \$25.00. ISBN 0-8242-0676-2.

Cutter - Sanborn Three-Figure Author Table: Swanson-Swift Revision. C.A. Cutter and Sanborn. 34 p. Libs. Unl. 1969. \$16.00. ISBN 0-87287-210-6.

Anglo-American Cataloging Rules, second edition. Michael Gorman and Paul W. Winkler, editors. American Library Association, 50 East Huron Street, Chicago, IL. 60611. ISBN 0-8389-3210-X. Hardback. 1978.

Anglo-American Cataloging Rules, second edition. Revisions 1983/Joint Steering Committee for Revision of AACR. 1984. American Library Association, 50 East Huron Street, Chicago, IL 60611. \$3.00.

Selected First-Priority Titles (con't)

U.S. Library of Congress. Subject Cataloging Division. Library of Congress Subject Heading, latest available edition. Washington, DC

Library of Congress Filing Rules, John C. Ruther and Susan C. Biebel. U.S. Library of Congress, Washington, DC 1980. 111 pp.

U.S. Library of Congress, Subject Cataloging Division. Classification: Class S, Agriculture, latest edition. U.S. Library of Congress.

U.S. Library of Congress, Subject Cataloging Division. Subject Cataloging Manual. Preliminary edition. 1984. \$20.00. Cataloging Distribution Services, Library of Congress, Washington, DC

International Directory of Booksellers. Michael Zils, editor. First U.S. Ed. Pub. by K.G. Saur. Gale 1978. \$120.00. ISBN: 0-89664-014-0

Encyclopedia of Associations: National Organizations of the U.S. Vol. 1. Denise S. Akey, editor. 18th ed. 1930 p. Gale 1983. \$185.00. ISBN: 0-8103-1687-0

Encyclopedia of Associations: Geographic & Executive Index. Vol. 2. Denise S. Akey, editor. 18th ed. 1080 p. Gale 1984. \$160.00. ISBN: 0-8103-1688-9

Encyclopedia of Associations: New Associations & Projects. Vol. 3. Denise S. Akey, editor. 18th ed. Gale 1983. \$180.00. ISBN: 0-8103-0130-X

Acronyms, Initialisms & Abbreviations Dictionary, Vol. 1, 2 pts. Ellen Crowley, editor. 8th ed. 1701 p. Gale 1982. \$115.00. ISBN: 0-8103-0505-4

World Guide to Abbreviations. 3 Vols. Bowker. Unipub Order No.: RRB8. \$60.00 set. ISBN: 3-7940-1298-4

World Guide to Abbreviations of Organizations. F.A. Buttress, editor. 6th Ed. 500 p. Gale 1980. \$115.00. ISBN: 0-8103-2020-X

Who's Who in World Agriculture. 2 Vols. Compiled by Francis Hodgson Editorial Staff. Pub. by Longman. 831 p. Gale. \$220.00. ISBN: 0-582-90106-5

World Almanac. Annual. \$9.95. ISBN: 0-911819-29-4.

International Organizations: A Guide to Information Sources. Alexine L. Atherton, editor. Series: International Relations Guide Ser.; Vol. 1. Gale 1976. \$44.00. ISBN: 0-8103-1324-3

Agricultural Research Centres: a World Directory of Organizations and Programmes. Edited by Nigel Harvey. 7th edition. Detroit: Gale Research Company, 1983. ISBN 0-582-90014-X

Selected First-Priority Titles (con't)

McGRAW-HILL ENCYCLOPEDIA OF FOOD, AGRICULTURE & NUTRITION, edited by Daniel N. Lapedes. McGraw-Hill Book Co., 121 Ave. of the Americas, New York, NY 10020. 1977. ISBN 0-07-045263-6.

Black's Agricultural Dictionary. D.B. Dalal-Clayton. Adam & Charles Black (Publishers) Ltd., 35 Bedford Row, London WC1R 4JH, UK. 1981. ISBN 0-7136-2130-3.

A Dictionary of Agricultural and Allied Terminology, John N. Winburne, editor. Michigan State University Press. 1962. 905 pp.

Webster's Third New International Dictionary, Unabridged: The Great Library of the English Language. Merriam Company-Editor, 2728 p. Merriam - Webster, Inc. 1981.

New York Times Atlas of the World. Rev. 2nd ed. Times Books 1983. \$49.95. ISBN: 0-8129-1090-7

Agricultural Statistics. Current Year and Continue (Annual) \$6.00. U.S. Dept. of Agriculture (for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402). SuDoes A1.47:date.

U.S. Dept. of Agriculture. Economics and Statistics Service. Agricultural Outlook. Current Year and Continue (Monthly) \$19.00. U.S. Economics and Statistics Service, Dept. of Agriculture (for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402).

Food and Agriculture Organization of the United Nations. FAO Production Yearbook. Current Year and Continue (Annual) \$25.25. Food and Agriculture Organization of the United Nations, Rome (for sale by UNIPUB, P.O. Box 433, Murray Hill Station, New York, NY 10016). ISSN 0071-7118.

Food and Agriculture Organization of the United Nations. FAO Trade Yearbook. Current Year and Continue (Annual) \$25.25. Food and Agriculture Organization of the United Nations, Rome (for sale by UNIPUB, P.O. Box 433, Murray Hill Station, New York, NY 10016). ISSN 0071-7126.

FAO Commodity Review and Outlook. Current Year and Continue (Annual) \$20.25. Food and Agriculture Organization of the United Nations, Rome (for sale by UNIPUB, P.O. Box 433, Murray Hill Station, New York, NY 10016).

Food and Agriculture Organization of the United Nations. FAO Monthly Bulletin of Statistics. Current Year and Continue (Monthly) \$8.00. Food and Agriculture Organization of the United Nations, Rome (for sale by UNIPUB, P.O. Box 433, Murray Hill Station, New York, NY 10016). ISSN 0027-0229.

(The data in the Yearbooks cover approximately five years up to a year or two prior to actual publication. The FAO Monthly Bulletin of Statistics brings the data reported in these yearbooks current to within nine months of actual publication.)

Selected Second-Priority Titles

- Rand McNally Road Atlas: United States, Canada, Mexico. Rand 1983. Deluxe ed. \$8.95. ISBN: 0-528-89420-X
- Times Atlas of the World. 2nd, Rev. ed. Times Books 1983. \$139.95. ISBN: 0-8129-1089-3
- Landsat Index Atlas of the Developing Countries of the World. World Bank. Series: World Bank Country Economic Report Ser.; Type II. 16 p. Johns Hopkins 1976. \$12.00. ISBN: 0-8018-1923-7
- McGraw-Hill Encyclopedia of Science & Technology. 15 Vols. McGraw-Hill. 5th ed. 12715 p. McGraw 1982. \$935.00. ISBN: 0-07-079280-1
- McGraw-Hill Yearbook of Science & Technology 1984. 520 p. McGraw 1983. \$46.00. ISBN: 0-07-045492-2
- The World Book Encyclopedia. 22 Vols. 14200 p. World Bk 1983. ISBN: 0-7166-0083-8
- Encyclopedia of the Third World. George Thomas Kirian, editor. 1694 p. New York, Facts on File Inc., 1978. \$70.00. ISBN: 0871964007
- Dictionary of Agriculture. G. Haensch, editor. 3rd ed. Elsevier 1963. \$29.80. ISBN: 0-444-40266-7
- World of Learning, 1983-84. 2 Vols. 34th ed. 1550 p. Intl Pubns Serv 1984. \$165.00. ISBN: 0-905118-93-6
- FAO-UNESCO-ILO World Directory of Distribution Sources of Educational Audio Visual Materials Relating to Agriculture & Food. FAO. Unipub 1979. Order No.: F1504. \$7.50. ISBN: 92-5-000638-1
- World Guide to Libraries. 5th rev. ed. Pub. by K.G. Saur. 1500 p. Gale 1980. \$225.00. ISBN: 0-89664-043-4
- Subject Guide to Books in Print 1983-1984. 4 Vols. 6098 p. Bowker 1983. \$110.00 set. ISBN: 0-8352-1658-6
- Books in Print, 1983-1984. 6 vols. 10217 p. Bowker 1983. \$169.50. ISBN: 0-8352-1650-0
- International Books in Print. Pt. 1, 2 Vols. 3rd Ed. Pub. by K.G. Saur Verlas Munich. 1500 p. Bowker 1983. \$175.00. ISBN: 3-598-20583-X
- Ulrich's International Periodicals Directory. 2 Vols. 23rd ed. 2071 p. Bowker 1984. \$210.00. ISBN: 0-8352-1824-4.
- Irregular Serials & Annuals, 1984: An International Directory. 9th ed. 1975 p. Bowker 1983. \$95.00. ISBN: 0-8352-1663-2

Selected Second-Priority Titles (con't)

Library of Congress Subject Headings: Principles & Application. Lois M. Chan, editor. Series: Research Studies in Library Science, No. 15. 347 p. Libs Unl 1978. \$30.00. ISBN: 0-87287-187-8

C.A. Cutter's Two-Figure Author Table: Swanson-Swift Revision. C.A. Cutter, editor. 4 p. Libs Unl 1969. \$11.00. ISBN: 0-87287-208-4

Subject Directory of Special Libraries: Science & Technology Libraries, Including Agricultural, Energy, Environmental-Conservation, & Food Science Libraries. Vol. 5. Lois Lenroot-Ernt, editor. 7th ed. Gale 1982. \$110.00. ISBN: 0-8103-0659-X

Introduction to the Anglo-American Cataloging Rules. P.K. Escreet, editor. Series: Grafton Books on Library Science. Westview. 1977. Lib. Bdg. \$19.75. ISBN: 0-233-96033-3

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CRC Handbook of Processing & Utilization in Agriculture: Volume II, Plant Products. Ivan A. Wolff, editor. 752 p. \$99.50. ISBN: 0-8493-3872-7

Selected Second-Priority Titles (con't)

Handbook of Chemistry & Physics. Robert C. Weast, editor. 59th ed. CRC Pr. 1978. \$49.95. ISBN: 0-8493-0459-8

Dictionary of Soils. G. Plaisance and A. Calileux (or Caleleux). Amerind pub. New Delhi. 1981. (English version).

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Livestock Health Encyclopedia. Rudolph Seiden and W. James Gough, editors. 3rd ed. Springer Pub 1968. \$27.50. ISBN: 0-8261-0003-1

A Dictionary of Livestock Breeds. I.L. Mason. Pub. by CAB Bks England. 268 p. State Mutual Bk. 1969. \$50.00. ISBN: 0-85198-007-4

Timbers of the World. 2 Vols. T.R.A.D.A. First U.S. Ed. Longman 1979. \$38.00. ISBN: 0-86095-836-1

The Fish Resources of the Ocean. J.A. Gulland. FNB. 255 p. Unipub 1972. Order No.: FN37. \$38.50. ISBN: 0-85238-055-0

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Hortus Third: A Concise Dictionary of Plants Cultivated in the United States & Canada. Liberty H. Bailey and Marion R. Sheehan, Illustrator; Nakayama, Macmillan 1976. \$99.50. ISBN: 0-02-505470-8

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Handbook of Legumes of World Economic Importance. James A. Duke. Plenum Pr. 356 p. Plenum Pub 1981. \$45.00. ISBN: 0-306-40406-0

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Complete Guide to Pest Control: With & Without Chemicals. George W.
Ware. Thomson Pub CA 1980. \$18.50. ISBN: 0-913702-09-9

A Growing Problem: Pesticides & the Third World Poor. David Bull.
Inst. Food & Develop. \$9.95. ISBN: 0-85598-064-8

Tree, Turf & Ornamental Pesticide Guide. W.T. Thompson. rev. ed.
150 p. Thomson Pub CA 1983. \$12.00. ISBN: 0-913702-22-6

The Insecticide, Herbicide, Fungicide Quick Guide. B.G. Page and W.T.
Thomson, editors. rev. ed. 140 p. Thomson Pub CA 1984. \$12.00. ISBN:
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Insects of the World. Walter Linsenmaier and Leigh E. Chadwick,
Translator. 360 p. McGraw 1972. \$25.00. ISBN: 0-07-037953-X

World Statistics in Brief: United Nations Statistical Pocketbook. 4th
ed. 241 p. Unipub 1980. Order No.: UN80/17/3. \$3.95. ISBN:
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Directory of International Statistics. \$20.00. ISBN: 0-686-84920-5

World Tables. World Bank, 2nd ed., 1980. Baltimore, Published for the
World Bank (by) the Johns Hopkins University Press, c1980. Maryland. 474 p.
\$27.50. ISBN 0801823897

Statistics Sources: A Subject Guide to Data on Industrial, Business,
Social, Educational, Financial, and Other Topics for the United States and
Internationally. Paul Wasserman, managing editor, Jacqueline O'Brien,
associate editor, Kenneth Clansky, assistant editor. 6th ed. Detroit, Mich.,
Gale Research Co., c1980. Michigan. 1098 p. \$74.00. ISBN 0810303981

Agricultural Statistics: A Handbook for Developing Countries. Pergamon.
1979. \$30.00. ISBN: 0-08-023388-0.

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World Economic Survey: 1983. 106 p. Unipub 1983. Order No.:
UN83/2C1. \$11.00. ISBN: 0-317-00919-2

UNESCO Statistical Yearbook: 1983. 1064 p. \$111.50. ISBN:
92-3-002150-4

Primary Sources Consulted: Lendvay's Primer for Agricultural Libraries,
Appendices V-VIII, 1980; and Elaine Cook, Commonwealth Agricultural Bureaux
Representative--North America.

APPENDIX E

INDIVIDUALS, ORGANIZATIONS AND INSTITUTIONS CONSULTED

- Mrs. Subarna K. Bajracharya
Librarian
National Agricultural Documentation Centre (NADC)
Agricultural Projects Services Centre (APROSC)
Kathmandu, Nepal
- Bishnu Hari Devkota
Assistant Librarian
IAAS Central Library
Rampur, Chitawan, Nepal
- Health Library and Literature Services (HELLIS)
The Second National Conference on the HELLIS Network
(HELLIS/National Health Documentation Center)
28-30 November, 1983
Sheraton Hotel, Kathmandu
Sponsored by HMG Ministry of Health, Bir Hospital and the
World Health Organization
- Peter Howland, Team Leader
Nepal/UK Silvicultural Research Project
Forest Survey & Research Office
Department of Forestry
Kathmandu, Nepal
- International Centre for Integrated Mountain
Development (ICIMOD)
Ekanta Kuna
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- B. Joshee
Science & Math Director
Peace Corps/Nepal
- Mrs. Shanti Misra, Librarian
Central Campus Library
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- The Research Center for Agriculture, Science and
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APPENDIX E

INDIVIDUALS, ORGANIZATIONS AND INSTITUTIONS CONSULTED (cont)

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