INTERNATIONAL WATERLOGGING AND SALINITY RESEARCH INSTITUTE (IWASRI)



RECOMMENDATIONS FOR IWASRI LIBRARY

Which improvements could IWASRI carry through, and how?

PAKISTAN
WATER AND POWER DEVELOPMENT AUTHORITY

MAY 1997

IWASRI Internal Reports (yellow cover) are issued to document data and facilitate the internal data exchange for staff of this institute only and are not published. Internal Reports are not distributed outside this institute and nothing from these reports should be quoted or referred to without prior permission of the authors and IWASRI.

International Waterlogging and Salinity Research Institute (IWASRI)

13 West Wood Colony Thoker Niaz Baig, Lahore, Pakistan.

IWASRI is a member of IUCN, The World Conservation Union.

Phone:

92 42 5221061, 5221063, 5221446

Fax:

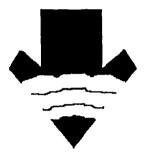
92 42 5221264, 5221445

E-mail:

dg@iwasri.edunet.sdnpk.undp.org

INTERNATIONAL WATERLOGGING AND SALINITY RESEARCH INSTITUTE (IWASRI)

Library
IRC International Water
and Sanitation Centre
Tel.: +31 70 30 689 80
Fax: +31 70 35 899 64



RECOMMENDATIONS FOR IWASRI LIBRARY

Which improvements could IWASRI carry through, and how?

 \mathbf{BY}

Peteke Feijten

PAKISTAN WATER AND POWER DEVELOPMENT AUTHORITY

MAY 1997

LIBRARY IRC PO Box 93190, 2509 AD THE HAGUE Tel.: +31 70 30 689 80 Fax: +31 70 35 899 64 BARCODE: 15375 LO: R 502 97 RE

TABLE OF CONTENTS

FORE	WORD		i
ABBRI	EVIAT.	IONS	ii
INTRO	DUCT	ION	iii
1	МЕТН	ODOLOGY	1
2	PRESE	ENT SITUATION	2
	2.1	Strategy and Objectives	
	2.2		2
	2.3	Staff	2
	2.4		3
	2.5	Library-Technical Facilities	3
	2.6	Collection	5
	2.7	Services	5
	2.8	Positioning	5
3	DESIR	RABLE FUTURE SITUATION	
	3.1	Strategy and Objectives	7
	3.2	Finances and Budget	7
	3.3	Staff	7
	3.4	Technical Facilities	8
	3.5	Library-Technical Facilities	8
	3.6	Collection	9
	3.7	Services	
	3.8	Positioning	
4		MMENDATIONS	
	4.1	Strategy and Objectives	
	4.2	Finances and Budget	14
	4.3	Staff	
	4.4	Technical Facilities	
	4.5	Library-Technical Facilities	15
	4.6	Collection	18
	4.7	Services	20
	4.8	Positioning	21
-	DICC.	Iggion	~ ~
5		JSSION	
	5.1	Priority	
	5.2	Feasibility	24
	D D D D	DENCES	20

APPENDIC	ES	
1	Objectives of the Publications, Library and Computing Branch 28	
2	Construction in Age of the IWASRI Collection	
3	Questionnaire for Users	
3A	Interpreted Results	
3B ·	Primary Research Results	
4A	Checklist for Network Libraries	
4B	Completed Checklists	
5	Suggestion-for-Purchase Form	
6	IWASRI Home Page 52	

FOREWORD

I am very happy that I was given the opportunity to visit IWASRI for three months, and that I have been able to do such a range of various things relating to my studies. Although it was not always easy to cope with circumstances that differ so much from what I am used to, I enjoyed my stay and I know that I learned a lot. I hope that my effort presents useful results for IWASRI. I could not have done the things without the help of many people, to whom I would like to express my gratitude here.

First of all Mr. Naber, ILRI's Head Librarian, who took the initiative of inviting me to go to IWASRI. He prepared me in many ways and let me profit from his wide experience. I especially appreciated his 'back up' visit in the end of April, during which we discussed many things, and during which he gave me useful advice and the confidence that I needed to finalize all my duties properly.

I want to thank Mr. Siddiq for the constant support he gave me, and the full trust he had in my capabilities. He introduced me to many people whom I wouldn't have met otherwise, and arranged everything I needed. And of course, he learned me some words of Urdu! Shukria, Mr. Siddiq.

I thank Dr. W. Wolters for treating me as a full NRAP staff member, and for always listening, answering my questions, trying to help solving any problem I came up with, and encouraging me to do whatever I felt was necessary to do. I thank the rest of the Dutch NRAP staff as well that I could always find a ready ear, and for helping me as far as they could.

Mr. Rietberg gave me his professional support during my stay, (though once our communication got stuck on the bottom of the ocean...), and will keep supervising me during the rest of my graduation course, whereas Mr. Van 't Land was a great help for me during the preparation phase of my graduation course. I want to express my gratitude to both.

I thank Mr. Khalid for his kind co-operation, and for letting me profit of his experience when, once in a while, he suggested how to do things. I thank Mr. Riaz and Mr. Aziz also for the effort they showed during the re-arrangement project, despite of the fact that it may not always have been such varied work.

I thank Mr. Imtiaz for lending me his desk and computer unconditionally for so many weeks.

With Mr. Asher, I had some useful discussion about networking, and in connection with that he designed a draft home page for IWASRI that had all the tools we thought were necessary for networking, for which I want to thank him.

ABBREVIATIONS

AGRICOLA Literature Data Base

AGRIS Agriculture Data Base of FAO

CAB Literature Data Base CATPAK Literature Data Base

CD-ROM Compact Disk-Read Only Memory

CDS-ISIS Data Base Management Software for Bibliographic Description

CEHANET Literature Data Base

DDC Dewey Decimal Classification

DRAiN Literature Data Base ENSICENT Literature Data Base

FAO Food and Agriculture Organization.

ICOLD International Commission on Large Dams

IMAGIC Database Management Software for Bibliographic Description
IPTRID International Program for Technology Research in Irrigation and

Drainage

IRI Irrigation Research Institute, Lahore

IWASRI International Waterlogging and Salinity Research Institute, Lahore NADLIN National Documentation Centre, Library and Information Network

NARC National Agriculture Research Center

NDP National Drainage Programme

NRAP Netherlands Research Assistance Project, Lahore

NWFP North West Frontier Province, Pakistan

PARC Pakistan Agricultural Research Council, Islamabad

PCRWR Pakistan Council of Research in Water Resources, Islamabad

PRO Principal Research Officer

SCARP Salinity Control And Reclamation Project, WAPDA

SDI Selective Dissemination of Information
SDPI Sustainable Development Policy Institute
UNDP United Nations Development Programme
WAPDA Water and Power Development Authority

WATERLIT Literature Data Base

INTRODUCTION

The library of IWASRI is a place for everybody in the field of waterlogging and salinity, where information on these subjects is concentrated and made accessible. Apart from this passive role, IWASRI's library made it its objective to disseminate information on this subject, as well to internal as external relation groups.

To fulfill these objectives, the library has a number of facilities and services. But changes in the organizational environment ask for reaction, and new technology and communication techniques have created new opportunities. If the library wants to keep its right of existence, it should continuously develop ways to realize its objectives. But because of shortage of funds and insufficient educated staff, it is sometimes hard for the persons involved with the library to continually initiate new developments.

Therefore, an external student professional was invited to identify the needs for change and make them into recommendations. These recommendations are presented in this report.

1 METHODOLOGY

In order to establish which improvements could be made, the present situation had to be clearly described. After some introductory research, a checklist was made on all subjects relating to the library, and this list was completed, making use of interview and observation.

Knowing the present situation, the desirable future situation could be explored in a similar way. In the description of the desirable future situation, opinions of different relation groups (i.e. staff members, library director and library professionals) were involved, making use of interview and questionnaires. Information on agricultural libraries from specialized literature was taken into account as well.

Next, the two descriptions could be compared. The gaps between them were the basis for the recommendations. The recommendations are all supplied with an overview of requirements in people, time and money.

Finally, the recommendations are discussed in terms of feasibility and priority.

2 PRESENT SITUATION

2.1 Strategy and Objectives

The objectives of IWASRI library are established in a document that was defined in July, 1993. This document describes the objectives of the Publications, Library and Computing Services Branch that the library is a part of. This means that the library's objectives are not clearly separately described, but have to be extracted from the total number of objectives. The objectives are given in Appendix 1.

People who are aware of these objectives are the IWASRI management, the management of research institutes in similar fields and the governmental persons that are involved with IWASRI.

The practical work-out of these objectives is done by the library director. He decides on the policy of the library and dissemination of information, although this is not laid down in any document. He delegated most of the library tasks to the library attendant, although the final responsibility rests with him. The dissemination of information task that IWASRI has for Pakistan, is carried out on every external happening like seminars, workshops and other meetings. The visitors' attention is drawn to the facilities that IWASRI library has for them, and some examples of fresh arrivals are displayed.

The objectives are directly shifted into an operational level, behind which no conscious strategy is hidden.

2.2 Finances and Budget

The source of financing for IWASRI library is threefold. Overhead costs like accommodation, salaries and equipment are paid by IWASRI as well as subscriptions to local newspapers and journals and the purchase of local publications. Subscriptions to international journals and purchase of foreign publications that require foreign exchange, are paid by UNDP and NRAP funds.

For none of these things, a budget is established. Overhead costs do not change extremely because the situation in the library hardly changes, and the costs of new publications are never very high because of the purchase policy (see paragraph 'Collection'). In case of any special expenditure, the library director discusses it with the three financiers, and when they agree on the need for the expenditure, they decide among them how it is paid.

2.3 Staff

The library has presently two staff members. One is the library attendant, mentioned before. He has a diploma of a six month library course taken at the National Library.

He has about 8 years of experience in the IWASRI library. The other staff member is a stenotypist, who does miscellaneous tasks on indication of the library attendant, and should replace him when he is not in. They are both full time staff members. In theory, there is a vacancy for a librarian, but this has not been fulfilled so far.

The library staff members do not ever attend any kind of re-education like a workshop because of lack of time.

2.4 Technical Facilities

The library is equipped with a Pentium (base memory 640 K, extended memory 15360 K, cache memory 256 K, 100 MHz, 3.5 inch drive and 5.25 inch drive, LBA hard disk 1282 MB) with EGA/VGA screen, CD-ROM player and matrix printer. The software packages, installed on the computer are SciMate (the old cataloguing software) and DRAiN (the new cataloguing software), WP 5.1, CD-ROM operator (WINSPIRS), Lotus 123 and Windows 3.11.

A branded Pentium-S, 166 MHZ + Modem with Laser Printer will be added to the library within a few weeks, that can be used as a public terminal, on which the catalogue can be searched (and in future may be other information sources like CD-ROM and Internet).

2.5 Library-Technical Facilities

Classification system

At present, monographs are arranged by accession number, and reports by institution name. Call numbers point only to shelf numbers (in case of monographs), or even only to book-case numbers (in case of reports). These call numbers are only in the catalogue, not marked on the publications themselves. DDC numbers are appointed to monographs, but not for arrangement purposes. Pamphlets and videos are not classified in any way, and are kept separately in boxes.

Cataloguing system

The software package that was used until the end of March is SciMate. All types of documents were included in one database, except for pamphlets (which are not catalogued at all). SciMate is a menu-driven package, with facilities for storage in several templates, indexed and free text retrieval and creating export files, etc. Recently, the shift to DRAiN software was made, because DRAiN has more facilities needed for a network, like storing data on on-going projects etc. DRAiN is menu-driven as well, and the two systems are about equal concerning remaining features and user friendliness.

Administration

There is no administration system for the control of the arrival of purchases and journal subscriptions, because the library attendant does not carry any responsibility for that.

Book preparation system

All fresh arrivals are noted in the stock book, and receive an IWASRI stamp on the title page, in which the library accession number (from the stock book) is written. In case of monographs, a DDC number is also written on the title page.

Information sources

Apart from the own collection, the library has the disposal of Soil CD and Water Resources CD and current awareness bulletins from other libraries. However, these are not known and therefore not used at all within IWASRI, and the library attendant has not received any instruction on how to use CD-ROMs.

Space and furnishing

The library is furnished with 25 bookcases with 5 shelves of ca. 100 centimeters each. This is sufficient to store the current collection, but a space problem will arise within a few months. Apart from the bookcases, there is room for two desks for the library staff to execute its tasks library users to use the library (studying, reading journals, consulting the catalogue, making notes, etc.) One big book-case is used as an archive for IWASRI publications. There is no room for other functions.

Loan administration

The loan administration is manual. Member cards for IWASRI staff and book cards in the back cover. When a member wants to borrow a book, the card is taken out of the book. On this card, the date and the name of the borrower are written. The same is written in a manual register, in which the borrower also puts his signature. The register would be unnecessary when borrower puts his signature on the book card instead of in the register. On the member card, the book titles or numbers are written. The library attendant regularly browses through the register to see whether any member is too late returning his books. This person receives a letter from the library attendant that he should return the borrowed book(s). When the borrower does not return the book(s) by then, the library attendant should contact the library director who will then personally contact the negligent borrower.

2.6 Collection

Construction

The collection consists of 469 books, 52 theses and 5293 reports and proceedings (internal and external), 36 journals subscriptions (on-going as well as closed), pamphlets, videos, directories and encyclopedias. The construction in age of the collection is shown in Appendix 2.

Acquisition

Reports are acquired from the institutes that publish them. They are acquired on an exchange basis: IWASRI sends its publications to similar research institutes and asks them in a covering letter to send their publications to IWASRI. Books are mostly acquired from booksellers/publishers in Lahore, and sometimes from foreign booksellers/publishers, by post. Several renowned booksellers/publishers in Lahore send their lists of fresh arrivals to IWASRI. The library director goes over these lists together with the director general to decide which publications should be purchased. The final decision is made in the bookstores where the library director judges the publications he marked on the lists, and strikes the bargain. This happens after every 2 or 3 months. Because the offer of new publications in the fields of interest is so limited, the problem of shortage of funds never rises, and no severe selection criteria are needed. Sometimes, IWASRI staff members make a request for a foreign publication. This request is then discussed within UNDP or NRAP, and when it is agreed, the publication is ordered by post.

Selection criteria

There are no defined selection criteria. The only criterion is that the publication has something to do with the subjects of waterlogging and salinity or relating fields. Changes in subjects are reflected in the purchase of publications.

2.7 Services

Apart from the (passive) task of offering a collection of information, IWASRI library has also the (active) task to disseminate information to its relation groups. This is done by making a current awareness bulletin and a current contents bulletin, both monthly. These are free, standardized library services. The current awareness bulletin is also distributed among libraries in relating fields, taking part in the NADLIN network.

2.8 Positioning

The IWASRI library has many contacts with other libraries, as well national as international. Some of these contacts are without engagement (for applying publications

from them, mostly on an exchange basis), and some are of a more binding nature, like networks. The IWASRI library takes part in a national network on water resources, NADLIN, and in an international network on irrigation and drainage, IPTRID. Taking part in those networks is useful for sharing information that the IWASRI library could not fully purchase from its own pocket, and for contributing to one of the main IWASRI objectives, which is: bringing together the latest knowledge in the field of waterlogging and salinity.

3 DESIRABLE FUTURE SITUATION

The results from the questionnaire that was distributed among internal users are given in Appendix 3.

3.1 Strategy and Objectives

In order to maintain its right of existence, the library should actively keep aware of its objectives, and check if they still meet the objectives of the mother organization. On the other hand, the objectives should be worked out in a strategy, that expresses the planned ways to fulfill the objectives. Finally, the developments that were undertaken should be evaluated afterwards, to see if they were right and if they were worked out in the right way, so that the experience can be used to do things more effective or efficient the next time.

It is important to involve the opinion of the users when developing the strategy, as well as during the evaluation, because in the end, their appreciation will be decisive for the survival and the means of the library.

3.2 Finances and Budget

For a library that is almost always short of money, the available money should be used as efficient as possible. Although the financial administration can be delegated to a specialized department of the mother organization, the library management should have detailed knowledge on the finances, and decide on spending of the budget (in consultation with the general management)

3.3 Staff

Sufficient educated staff is essential for a well-functioning library. Because there are different kinds of activities to be done in a library, different kinds of staff members are required. In a small library like the IWASRI library, the distinction between librarian and library attendant is sufficient. According to Naber (1993), the librarian should be responsible for 'overall management and policy-making; the collection of publications; classifications and documentation; reference and information work and user instruction.' Library attendants are responsible for 'book and journal administration; cataloguing and book preparation; loan administration and day-to-day affairs'.

It should be clear which tasks should be fulfilled by whom, and who has which responsibilities.

To keep up with new developments, and to interact with colleagues, which will increase the capacities and motivation of the staff members, they should attend (re)education

events on a regular basis (e.g. once a year), like seminars, (refresher) courses and workshops.

3.4 Technical Facilities

Technical facilities (hard and software) are only needed to facilitate library staff and library users; they should not be a target in itself. In a small library, technical facilities should be there for storing, maintaining and searching the catalogue, for consulting a few information sources other than the own collection (e.g. CD-ROMs and Internet) and for making all the necessary documents. The technical facilities should not be used for other purposes, because this only increases the risk of damage to either hard or software.

3.5 Library-Technical Facilities

Classification system

Chan (1981) says on this that '...library classification serves a dual function: (1) as a shelving device, which is considered to be the primary purpose of classification (...); and (2) as a means of organizing bibliographic entries in printed catalogues, bibliographies and indexes in a systematic order. As a shelving device, library classification has two objectives: (1) to help the user identify and locate a work through a call number; and (2) to group all works of a kind together.' At the moment of this writing, the collection is being re-arranged, using the most appropriate classification under the present circumstances, namely alphabetically by author.

Cataloguing system

The main function of a catalogue is that it makes each publication in the collection accessible through one or more entries preferably at least author, title word(s) and subject. Since the introduction of computerized catalogues, the number of entries is nearly unlimited within one database. The conditions for this are a data entry template that contains these entries, and the facility of creating indexes on the most used entries Secondly, a computerized catalogue can take over the function from a stock book, namely for administrational control.

Finally, a catalogue can give statistical information on the collection, especially when it is connected to a loaning and/or reservation system.

Administration

A proper administration of journals and book ordering should be kept, to avoid that journal volumes are missing or that books are unnecessarily doubled.

Book preparation system

Each publication should be supplied with no more and no less than the necessary information, which is: a library stamp, which makes clear that the publication is owned by the library, a classification code and a unique number or code which identifies the publication for administrational control purposes.

Space and furnishing

The ideal library should have space for the following functions: storing the collection in a way that users can easily browse through it; a loan desk; an office or at least a desk for the librarian; a desk for the library attendant(s); a display for journals; room for studying and reading; a catalogue that can be consulted by users; room for watching/listening audio visual materials (if any).

Loan administration

The loan administration needs clear regulations that are strictly lived up to, because otherwise publications will get lost. On the other hand, it should be possible to make exceptions, especially in a research library where researchers are concentrating on special subjects for a restricted period of time (during projects).

Reservation system

New arrivals are sometimes in great request by several users at a time, so then a system should be available to give each a fair chance to get it, in sequential order of request. A reservation system serves for this purpose. Because DRAiN has no facility for this, it could be a manual system.

3.6 Collection

Construction

The construction of the collection should be known in several ways, e.g. in age, in types of publication and in subjects, so that its weak points will come out. Then the selection criteria can be adapted to the needs of the collection, so that it can be strengthened in the course of time. Strengthening a collection not only means adding new publications but also removing useless publications.

Acquisition

Publications can be acquired from several sources, that do not all require cash payment. With other research institutes in relating subject fields, exchange agreements for reports can be established.

Local sellers are much cheaper than foreign book sellers, even apart from unfavorable differences in exchange. When you always buy at the same (local) book sellers, they might give some useful privileges like discount or awareness service on newly published materials on the subject field of the mother organization.

Selection criteria

Especially when a part of the publications is acquired through exchange agreements, or as gifts, strict selection criteria should be taken into account, because useless publications will never be issued, and only pollute the catalogue as well as occupy precious space. Selection criteria should be developed and maintained by the librarian. To keep up with shifts of interest of the mother organization, he (she) should regularly attend meetings or seminars concerning this. Also suggestions from staff members who are specialists on (a part of) the subject field, can be very helpful.

Other information sources

Nowadays, with decreasing library budgets, increasing costs of publications, and rapid development of new (communication) technology, it is good to have information sources other than the own collection. Through computer and modem, large databases with worldwide coverage on each imaginable subject can be accessed on line, although the costs of this are quite high. Similar information can be found on CD-ROMs, which can be consulted off line when you have a CD-ROM player and complementary software on your computer. Resource sharing with other libraries in similar subject fields can be a solution as well, e.g. by setting up an Inter Library Loaning system. Books and reports can be exchanged on a loaning basis, and journal articles or papers from proceedings can be photo-copied and sent by post. When such a system is established for some time, the participants could even compare their collections, and agree on spreading the subjects among them (like subscriptions to some very expensive international scientific journals).

3.7 Services

Apart from the standard library-technical facilities, the IWASRI library could offer extra services to its users, which should depend on their needs, for example:

Question-and-answer service. This is the ultimate form of reference work, because the librarian does not only supply the user with a number references in which he can find the answer, but also tries to give a direct answer to the question, making use of several information sources.

<u>Photo copying facility</u>. This facility is especially useful for external users, who are not allowed to borrow a publication.

<u>SDI service</u> This service is for users specially who want to be regularly informed about their personal subjects of interest.

3.8 Positioning

The library should try to be an active and indispensable part of the organization that has a close relation with its users. Users should be aware of what the library can offer them, and these promises should always be made true. Informing the users about new developments in the library can help in keeping them involved with the library. To establishment of a close relation with the user it should start from the moment that the user enters the organization.

The relationship with other libraries is important as well. Ifidon (1994) says that one of the problems with agricultural libraries in developing countries is that there is only 'a low degree of co-operation between (related) libraries, where as this could be useful and economic'. In the past, 'networking has been found in many instances to be very effective in linking professionals, both researchers and practitioners together and creating a community spirit among them. Researchers in developing countries, especially those working in applied sciences, suffer from the deficiency that they are isolated from the international scientific community. Managers and practitioners working in irrigation and drainage suffer from the further disadvantage that the nature of their work takes them away from urban centers and that relevant literature to them is in the form of 'reports' (grey literature), and it is difficult to get hold of.' (ILRI, 19..) Because IWASRI has some experience with networking, and because it applied for funding from the National Drainage Program, being the coordinating center of a network could be an appropriate role for the IWASRI library.

Within the IPTRID network, ILRI in the Netherlands is the coordinating center for libraries in Egypt, India, Pakistan and a few other countries. After a period of about 2 or 3 years, these libraries should become coordinating centers themselves, for the libraries in relating fields in their own country. That time has come for IWASRI now. But before any activity can start, an overview had to be made of the state of affairs of each potential participant, so that a decision can de made upon the basic level on which the network can start.

IWASRI has no budget for networking; but a proposal was written for the National Drainage Program (NDP), a funding program which supports projects that have to do with drainage in the broadest sense. This proposal, called 'Networking system at country and global level', was written in December 1996 and is presently under consideration at NDP. When the fund is granted, a large amount of money will come available for staff, technical facilities etc. But the chance that this project will be approved is only very small, so recommendations on this should take a very small budget as a starting point.

In first instance, the existing NADLIN network should be used to recruit members, because they are all libraries in the field of water resources. The majority of these libraries was visited to draw up their state of affairs. Apart from that, inquiries were made about the ability and willingness of the libraries to join the network.

To be able to compare the libraries, a checklist was made that covers all general library issues. This checklist for network libraries is presented in Appendix 4A, and the completed checklists (for 6 libraries) are in Appendix 4B.

After comparing the lists, it turned out that the collections of about half of the libraries are not (completely) computerized (yet). And it turned out that most of the libraries have to cope with decreasing budgets and rising costs, which often means that there is a shortage, or sometimes even a lack of professional staff, or that there is hardly any budget for fresh arrivals.

Another conclusion, on the contrary, is that all collections cover subjects that are (partly) relevant to each other, so resource sharing could mean an increase and improvement of information sources for all members. It is also clear that, when libraries are in shortage of staff, money and means, networking is the very thing that could increase the quality and quantity of information sources for them, without increasing the costs proportionally.

Nevertheless, due to shortage of staff, time and money, the members were not very enthusiastic about actively contributing to the network. They all assumed an attitude of expectation.

Taking all these aspects into account, it seems desirable to start a network, but only at a very beginning level, and not to make plans that are too ambitious.

4 RECOMMENDATIONS

4.1 Strategy and Objectives

Although the objectives of the library are officially laid down, they should be reviewed on a regular basis, to ensure that they still meet the needs of the mother organization, and to check whether they are not described in too limited terms.

Objectives should be defined in such a way that the library's right of existence is ensured on long term.

On medium term (preferably annually), a development plan for the next coming period should be written. In this development plan, the intentions of the library and the requirements for carrying out these intentions can be described. In that way, the mother organization can decide if the requirements can be granted, and set the budget for that next coming period.

On the same regular basis, a report should be written on the extent to which the library has been able to meet the objectives, and to fulfill the intentions as described in the development plan, in order to inform the management of the mother organization on the status and progress of the library. An abstract of this report could be inserted in the annual report of the mother organization.

To ensure that the two above named documents are based on valid data, the library should be very well aware of the opinion of its users. This can explicitly be done by keeping an annual user-poll. The questionnaire in appendix 3 gives an example of which questions could be included in such a user-poll.

	Update objectives	Writing annual development plan	Writing annual report on results	Üser-poll
time	1 day/year	2 weeks (including preparations that can be spread over several weeks)	2 weeks (including preparations that can be spread over several weeks)	I month, spread over 3 months (for developing method, executing the research, processing results, drawing conclusions and writing a report)
money	-	-	-	-
people	librarian, finally in consultation with general manager/director	librarian, in consultation with library staff members and general manager/director	librarian, in consultation with library staff members and general manager/director	librarian, but the first time, it also lends itself very well to be done by a student

4.2 Finances and Budget

The library should yearly present a proposal for budget, linked to the annual development plan recommended in the previous paragraph. When there is a certain budget to be spent, the motivation of the involved staff members may increase to work on the development of new facilities or services. The budget could be proposed by the library management, and finally decided upon by the (financial) management of the mother organization.

	set a yearly budget
time	1 week
money	-
people	librarian in consultation with financial
	manager

4.3 Staff

A librarian should be recruited, because he has the knowledge and the authority to lift the library to a higher level, so that it can fulfill its objectives in a more sufficient way. The library attendant could continue fulfilling his current tasks, while the librarian could take over the responsibilities from the library director (who at present has only little time for library affairs), and he could develop some new facilities or services, based on the recommendations made in this report.

The librarian should have an M.Sc. in Library Science and could be recruited through the Pakistan Library Association.

When recruiting a librarian is, for any reason, impossible, it would be good to send the library attendant to a refresher course or training. There he could learn about new information technology and information sources, and how to implement them in his own library A course on the software that DRAiN is based on, CDS-ISIS, could be useful as well.

Another alternative, when a librarian cannot be recruited, is to invite a student from the College of Information Service and Management in the Netherlands for a period of 5 months, to spend his (her) practical period in IWASRI. He (she) could carry out some of the recommendations from this report, and help to finalize and stabilize the changes that are currently being undertaken. It could also be done jointly with a Pakistani student as an assignment for his (her) M.Sc. in Library Science.

The tasks and responsibilities of each staff member should be laid down in a job description. In that way, each of them can always refer to his job description in case

of obscurity about certain duties or activities or responsibilities, so that a more effective situation occurs because everyone knows what he should do, and what he can leave over to others. Regularly (e.g. once a year), the job descriptions should be reviewed to check whether they are still up-to-date. In this way, changes in duties or objectives of the library should always be reflected in changing job descriptions.

	Recruit Librarian	Train Library Attendant	Recruit Library Student	Make Job Descriptions
time	I week for recruiting, spread over 2 months, and 1 week for breaking him/her into the job and the organization	varying from one day (seminar) to several months (course)	2 days, spread over 3 months (partly to be handed over to NRAP or University of Library Science Lahore)	I day per job description
money	Rs 7,000/month	varying, depending on duration and organizer. Example: course on CDS-ISIS for 2 persons, 4-6 weeks: Rs 10,000 (more information at PLA)	monthly allowance and cost for lodging (in case of a Dutch student). May (partly) be paid by NRAP	-
people	current library director and somebody from the personnel department for recruiting; library director and library attendant for breaking in	library attendant	library director in consultation with NRAP or contact from University of Library Science Lahore	librarian or library director in consultation with member from personnel department

4.4 Technical Facilities

The library is presently equipped with sufficient technical facilities.

4.5 Library-Technical Facilities

To make the users less dependent on the library attendant(s), the catalogue should be available on a public terminal, on which DRAiN is installed with read-only access. The library attendant should be willing to explain the users how to search, but also a short and clear written manual should be put next to the terminal. If CD-ROMs or a connection to Internet are available, then they should be on this terminal (which will most probably be a stand-alone PC) as well.

A journal registration system should be developed, to be sure that no volumes are missing, and if there are, that the publisher can be contacted. This can most easily and effectively be done manually. For each journal, a card in a card box or a page in a notebook can be reserved, on which the name of the journal and the name and address

of the publisher should be written. Using one line for one year, every arriving volume is registered. In this way it is easy to check if no volumes are missing. It should be made clear whose responsibility it is to maintain the journal registration (the library directors' or the library attendants').

In a book registration system, a card should be prepared for each book that is ordered, and kept on file in alphabetical order of the author's name. When the book arrives, the card should be removed from the file. This prevents duplication.

The space problem cannot easily be solved because of a general space problem within IWASRI. But when the NRAP project ends in the end of June, some NRAP staff members will leave, and then some space might become available. This space should be given to the library, because the library is in acute for storing about 4,000 reports that were recently donated.

The current bookcases are not the most spacious ones. It would better to have simple racks, that take less space than the current bookcases, and that can easily be constructed up to the ceiling, so that on the upper shelf, materials can be stored that are not often used, like pamphlets. Also a small ladder would then be needed.

When extra space is available, a display for fresh arrivals should be arranged, including the latest journal volumes. This display should be strategically placed, so that when you enter the library, that is about the first thing you will see. For journals, a special cupboard should be purchased, with shelves for the display of the latest volumes, and space for preceding volumes behind the front flap, which is hinged at the top, and can be lifted. Because IWASRI does not have that many subscriptions, this cupboard might be sufficient for displaying fresh arrivals other than journals as well.

A table with a few chairs should be put in the library, so that users can sit down to read a publication or journal, and make notes. This is especially needed for external users, who are not allowed to borrow any publication.

The loan administration should be better organized. The facilities for the current manual system are sufficient, but the use of a stock book should be stopped because the users' signature can very well be put on the book card (and that was the only reason the stock book was maintained for). Next, the regulations should be observed stricter. Users should be aware of the regulations and of the sanctions that are taken when they don't live up to those regulations. Those sanctions should actually be taken, and it should be clear whose responsibility it is to supervise the loan administration, and take the sanctions.

To meet the users' needs regarding the collection optimally, a reservation system should be created. DRAiN does not have a facility for this (so far), but it can easily and effectively be maintained manually. When a book that a member wants to borrow appears to be issued to another member (to be checked in the box with book cards of issued publications), a note is attached to the book card belonging to that book. On the note, the name of the member who makes the reservation, his telephone number and the date are written. As soon as the publication is returned by the first borrower, the publication is placed in a reservations shelf, and the member who made the reservation is notified that his publication is back in the library, ready to be issued. When the person has not come to borrow the publication after one week, the publication will be put back in the collection, and the reservation will expire.

The cataloguing software DRAiN should be equipped with facilities for a loaning system and a reservation system. Manual systems can be very efficient, but when loaning and reservation systems are linked to the catalogue, statistics about the use of the collection can be obtained, which is helpful for collection building.

	Public Terminal	Journal Registration	Book Registration	Creation of Extra Space	New Bookcases
time	0.5 day	I day for set up and I hour/ week for maintenance	I hour/week for maintenance	2 days - I week for cleaning and arranging/furnishing	I week to empty and remove the old ones and settling and filling the new ones
money	Rs 170,000	app. Rs 200 for a card box and cards, or less for a notebook	-	-	Rs 7,000/piece
people	somebody to install the PC	library attendant for maintaining	library attendant for maintenance	supporting staff for cleaning and fibrary staff for arranging / furnishing	library staff for moving books and bookcases

	display of fresh arrivals	tables and chairs	loan administration	reservation system	creating loan and reservation systems in DRAiN
time	I hour/week	0.5 day to arrange the room properly	2 hours/week for maintenance	0.5 day to set up	2 weeks
money	in case of new bookcase: Rs. 7,000	Rs 12,000 (special library furniture)	(in case of financial sanctions, it even brings money in)		paid through IPTRID project (which owns and maintains DRAiN)
people	library attendant	office manager for arranging	library attendant	library attendant	information specialist and software programmer

4.6 Collection

A thorough collection-research must be carried out to get knowledge on the strong and weak aspects of the collection, which is necessary to improve the quality of it by collection building.

Selection criteria should be defined. Especially in case of gifts/donations or publications that were acquired through an exchange agreement. Those are not always relevant for the mother organization, so they should not all just be inserted in the collection. In each single case, it should be decided whether the publication falls within the scope of the mother organization. When the above mentioned collection-research is carried out, the results of this should be decisive for certain (temporary) emphasis in the selection criteria.

A standard form should be designed, on which library users can suggest the purchase of a certain publication. An example of such a form is Appendix 5.

Based on the information on the age of the collection, the conclusion that some redevelopment is necessary, seems to be justified. Too many outdated publications only pollute the collection and the catalogue, and occupy precious space. But it should be done very carefully, because old publications can still be valuable. If the above mentioned collection-research is conducted, the results of this should also be taken into account. Redevelopment can only be started if clear selection criteria are defined, because otherwise the responsible person does not know what to remove, and what to keep in the collection. When a publication has more than 2 copies, those should be removed as well.

Some old publications are about to fall to pieces, so these should be (re)bound or repaired.

The latest versions of relevant CD-ROMs should be purchased, and a system for purchasing references from those CD-ROMs should be designed as well (document delivery service).

Other national information sources should be used, like the central databases that are maintained by the NADLIN network. An agreement should be made with the participating libraries on an Inter Library Loaning system.

Another useful, and not so expensive information source is Internet. This source doesn't only give access to other catalogues worldwide, but also to primary information from research institutes, ministries etc. The library attendant should receive a short training on how to use Internet, so that he can make bookmarks for relevant sites on the subjects waterlogging and salinity.

	collection research	developing selection criteria	redevelopment	rebinding/ re-pairing	1,	document delivery service	Inter Library Loaning service	connection to Internet
time	3 months	I week, and then time for maintaining them	during day-to- day affairs	2 weeks	I day to inform about which CD-ROMs are available and relevant	and time for	•	l day to arrange and a few day parts for a short course

	collection research	developing selection criteria	redevelop- ment	rebinding/ rpairing	purchase CD-ROMs	document delivery service	Inter Library Loaning service	access to Internet
money	lodging and monthly allowance for student		-	Rs 15,000	examples: AGRI- COLA database \$820. CAB International \$2,100/. annually	photocopying costs and postage (in case of external delivery)	postage	Rs 2,000 for installation and Rs 30 per hour with a minimum of 15 hours a month, plus telephone costs
people	student from Netherlands or Pakistan	librarian	librarian	bookbinder	librarian	library attendant	library attendant	computer professional for installation and librarian for searching

4.7 Services

In order to offer a more tailor-made service level, a Question-And-Answer service could be developed. Preceding this, a sufficient number of information sources should be made available. Next, the library attendant should be trained on how to use these sources, how to handle a request for information, and how to document the results in a proper way. It should be decided whether this service is only for internal, or also for external users. Another decision should be made about whether the results are only in form of references, or that the service also includes document delivery. If it includes document delivery, it should be decided who pays for the delivered documents.

For very personal service, the SDI-service could be developed, through which users are regularly pointed out to recently published documents that are of interest for them especially. This service can be limited to publications that were recently added to the own collection, but also to all publications in the users' field of interest. This implies that also information sources like (new versions of) CD-ROMs are used. The set-up of this service is very time-consuming, because an interest profile has to be drawn up of every user, and during the first times, the profiles will most probably have to be adjusted (because the number of hits was too large or too small, or because the result was simply not relevant).

To meet the needs of external users, who are not allowed to borrow any publication, a photocopying machine should become available in the library. It can also be used by internal users for copying journal articles (because journals can not be issued to them).

	question-and-answer service	SDI-service	photo-copying machine
time	App. 2 hours per question	0,5 day to set up one profile and 2 hours per period to execute and maintain one	I hour to install it and I hour a week to maintain it (supplying with paper etc.)
money	In case of document delivery: a few rupees for photo-copying or printing from Internet/CD-ROMs (exclusive of resulting document delivery)	- (exclusive of resulting document delivery)	Rs 100,000
people	librarian	librarian	library attendant

4.8 Positioning

A small booklet about the library and its services and facilities should be designed. It should also contain some practical information on opening hours and loaning regulations. This booklet can be given to new staff members, but can also be distributed on external events like seminars of the mother organization.

	booklet about library	organize meeting	develop IWASRI homepage
time	I week to write and produce it spread over 2 months	I week for preparation and 2 days for the meeting itself	1 week
inoney	Rs. 6,000 for 1000 prints:	Rs. 30,000 for 10 participants (5 from/5 out of Lahore)	Internet connection costs
people	librarian	librarian or person concerned with networking	computer professional in consultation with librarian

Concerning networking, the following recommendations seem to be appropriate:

* Organize a meeting/workshop for all members with the following objectives:

Giving the participants an opportunity to get to know each other, so that a community spirit might be created among them exploring the participants' thoughts about networking, and their contribution to that explaining the IPTRID network demonstrating the DRAiN software collecting suggestions for following steps in networking deciding on a certain basic level to be reached by all participants outlining the needs of each library to reach that basic level develop an IWASRI home page on Internet to interlink with the network participants. In this way, they will have access to information on IWASRI topics such as current research projects, staff members and fresh arrivals (on long term, DRAiN might be made accessible through Internet, so that the whole collection can be browsed by external users). In course of time, every participant could develop a similar homepage, so that they all have access to each others' information on on-going research, literature etc., and to each others' catalogue databases.

The set up of a central database will in this case not be necessary, because each database is directly accessible through electronic links. A search facility could

be developed through which the domain of your search is limited to the catalogues of the participating libraries.

Appendix 6 gives an example of what such a homepage could look like.

More in general: make optimal use of the chances of new technology when this makes communication more effective and/or efficient, e.g. using e-mail for sending updates of databases instead of sending floppy disks by post, or scanning journal articles (and then send them through e-mail) instead of sending photocopies by post, or discuss through an electronic discussion box instead of having a central meeting. This needs considerable investments in hard and software and complementary tools, but on long term the costs will earn themselves back, while especially the hardware can be used for other purposes as well.

Because this recommendation is so general, no specifications about time, money or people are given.

5 DISCUSSION

In the previous chapter, the recommendations have been mentioned without any form of weighing. But because many of them differ in priority and feasibility, some considerations are made about that at this point. This chapter does not pretend to be exhaustive, nor does it have to do with 'the truth', because there is no such thing as a truth in this situation, for every involved person will think of it differently, and (changing) circumstances have their influences on these opinions as well.

5.1 Priority

Many of the mentioned recommendations are dependent on other recommendations. The best example is the recruitment of a librarian. When there is no librarian, several recommendations drop out. Also, many recommendations about how to arrange space are only valid when extra space is created, which is a recommendation on itself. This means that extra space and the recruitment of a librarian score very high on the priority list.

Like with all things, a library first needs a solid and quality basis, and then can start to work on expanding extra facilities. This also means, that you must first of all arrange things properly internally before you can come out externally. You should always take care that you can prove what your promise. For example, a Question-And-Answer service should not be started before a sufficient number of information sources is available, and before the librarian knows how to do reference work in those information sources. Also, a central database for network purposes cannot be built before the own collection is fully and properly catalogued. Another condition for a central database is the creation of facilities for exchanging publications from that central database (Inter Library Loaning system and/or Document Delivery System) among the participants. At this moment, shortage of space is the most pressing problem, especially for the library attendant, for whom the recommendation 'creation of extra space' has the highest priority on short term.

On long term, the recruitment of a librarian has a very high priority, because the fulfillment of this single recommendation will increase the chance of fulfillment of a great number of other recommendations. Moreover, the presence of a motivated librarian will improve the quality of the library on all points. From then on, IWASRI can start with networking activities, which have a high priority for the library director. Networking has also a high priority for IPTRID, of which the librarian arranged my stay here. The very beginning of networking can already be started because it does not lay claim on any facility that hasn't been realized yet. Moreover, because networking is meant to make people share ideas and knowledge from their experience, it can create a spirit of change, that is needed to carry out any recommendation.

From the users' point of view, the availability of a public catalog terminal, room for studying and reading and display of fresh arrivals have the highest priority. The latter two can only be realized when extra space is created, and the public catalogue terminal might be realized on short term, because a second computer has, at the moment of this writing, already been ordered, and can arrive in the library any day. These considerations justify the following priority list:

- 1 Creation of extra space
- 2 Recruiting a librarian
- 3 Organizing a meeting for network participants

5.2 Feasibility

There are several aspects that affect the feasibility of each recommendation. The most important one is undoubtedly money. Especially for IWASRI itself is this a critical issue because it is functioning under WAPDA and therefore has limited freedom of expenditure. NRAP and UNDP may have more resources, and single donations can perhaps be applied for at certain agencies like UNESCO or NDP. Other feasibility aspects are time and knowledge (although those can in the end also be expressed in money) and experience.

Some recommendations may in first instance seem to be feasible for free, but they are often based on conditions of which the realization costs money. For example the development of a home-page can be done by regular IWASRI (or NRAP) employees, but it cannot be done before the recommendation 'connection to Internet' is fulfilled. Still there are a few recommendations that are not very costly and that can be handled by the current staff members.

Some recommendations are once-only (like arranging a table and some chairs for studying and reading purposes), others are frequent (like once a year for writing an Annual Development Plan), and others are even permanent (like a reservation system). The once-only recommendations can be executed by a temporary person, like a student, but the other two categories have to be done by regular staff members.

Considering these feasibility issues, the following recommendations seem to be the most feasible:

- * Recruit a library student through NRAP
- * Develop and maintain a journal registration system
- * Improve and sharpen the loaning system

Conclusion

For some recommendations, priority and feasibility are contradictory. For example, the recruitment of a librarian has a high priority, but a low feasibility because it is so expensive. The introduction of a form for suggestion of purchase, on the other hand, has a relatively low priority but a high feasibility because it can easily be done under the current circumstances. Of course, it is most effective and efficient to determine the recommendations that have a high priority and a reasonable feasibility.

Considering this, the final recommendation list should, to my opinion, look like this:

- * Creation of extra space
- * Recruit a library student
- * Recruit a librarian
- * Organizing a meeting for network participants
- * Improve and sharpen the loaning system
- * Develop and maintain a journal registration system

Of course, when a librarian or library student are recruited, they should decide again which issues are feasible and have priority under the circumstances that are valid at that moment, which may give a different result.

6 REFERENCES

- Chan, L.M., 1981. Cataloguing and Classification: An Introduction. New York, McGraw-Hill Book Company
- Ifidon, S.E., 1994. Planning with and without Facts. Library Review 43, nr. 6, p. 27-36
- ILRI, 1991. ILRI Contribution to IPTRID Networking: Bringing professionals on waterlogging and salinity control in developing countries together through networking. Outline of a project proposal. ILRI, Wageningen, The Netherlands.
- Naber, G., 1991. An Agricultural Library: Its Start and Management. ILRI Publication 50, ILRI, Wageningen, The Netherlands.

APPENDICES

Appendix 1 Objectives of the Publications, Library and Computing Branch

Establish and chair a Publications Committee comprising one representative from the Planning and Co-ordination Section, one PRO from the Research and Development Section and an editor to ensure all IWASRI publications follow a standard format and maintain a high standard.

Provide assistance in the preparation and printing of reports, papers, newsletters etc. and organize all printing backup service in IWASRI.

To continually develop and maintain, in association with the IWASRI Directors, a specialist library facility involving: identifying suitable journals, periodicals, research abstracts, videos and other audio-visual material, and develop and maintain computerized record and retrieval system to support the research coordination effort of IWASRI.

Establish and maintain linkages with other libraries and information systems etc.

- 1 Prepare bibliographies on selected topics
- Provide editing facilities for staff and develop an editorial policy for IWASRI Prepare and circulate a regular internal newsletter giving listings of all new acquisitions in the IWASRI library and the contents of pages of the newly arrived journals.
- In collaboration with Technology Transfer Section, prepare display material and provide assistance with setting up displays to promote IWASRI at seminars, conferences and exhibitions etc.

Provide assistance to the Research Directors in the organization of seminars and workshops involving IWASRI and its collaborative organizations

In association with the Technology Transfer Section, prepare a regular newsletter that provides information on the results and progress of the IWASRI collaborative research work. The newsletter will be for both internal and external circulation.

Establish and maintain a computer network system for IWASRI

Provide technical computer backup and maintenance service for IWASRI. In addition, ensure computing hardware and software purchases are compatible throughout IWASRI and expert advice is provided to maximize the effectiveness of the resources provided

Any other duty as required by the Director General, IWASRI.

Appendix 2 Construction in Age of the IWASRI Collection

Years	Number of
	Publications
1942 - 45	9
1946 - 49	30
1950 - 53	50
1954 - 57	51
1958 - 61	170
1962 - 65	450
1966 - 69	419
1970 - 73	461
1974 - 77	769
1978 - 81	852
1982 - 85	1086
1986 - 89	1520
1990 - 93	1082
1994 - 97	254

Appendix 3 Questionnaire for Users

QUESTIONNAIRE FOR IWASRI STAFF MEMBERS ABOUT THE PRESENT AND FUTURE ROLE OF IWASRI LIBRARY

1.	Please indicate which information sources you numbers 1, 2 and 3 (1 is the source you use the one after that) to three items from the following	e most, 2 the one after that, 3 the
	A. reports	•••
	B. theses	
	C. journals	•••
	D. papers from proceedings	:
	E. books	•••
	F. other sources, namely	•••
2	important/valuable information, by appointing r from the following list:	sources you find the most numbers 1, 2 and 3 to three items
	Λ. reports	
	B. theses	
	C. journals	
	D. papers from proceedings	•••
	E. books	
	F. other sources, namely	
3.	How often do you pay a visit to the library? A. more than once a week B. 1 - 4 times a month C. 1 - 3 times every three months D. 1 - 4 times a year E. never F. irregularly: for special occasions (like the be	eginning of a new project)
4.	What is (are) the purpose(s) of these visits?	1 3 7
	A. borrowing (or returning) a publication	
	B. reading a publication	
	C. asking for the purchase of a publication that moment	t is not in the collection at that
	D. other purpose(s), namely	······································
5.	Are you satisfied about the results of your vis for)? A. always	its (do you get what you come

	B. mostly C. sometimes, sometimes not D. seldom E. never
6.	Is there any subject on which the library has insufficient information?
	Λ. Yes, namely Β. No
7.	What do you find a favorable thing about the library in its present state?
8.	What do you find an unfavorable thing about the library in its present state?
9.	Please make a priority list of the following changes that could be established to improve the library (add numbers 1 - 8, of which 1 has the highest priority and 8 the lowest) Access to Internet
	Display of fresh arrivals Reservation system (when the publication you wanted to borrow was issued to another person, you get a message as soon as that person returns it, and you get priority in borrowing it) Room for studying and reading
	Reproduction facility (a photocopying machine)
	Question-and-answer service (you go to the librarian to present a question to which you cannot find the answer yourself, and he gives you a message as soon as he has found the answer, making use of international databases etc.)
	Access to the catalogue on a public terminal (on which you can search by keyword or author etc. yourself)
	Inter-library Loaning System (you can look in a central database, in which the collections of several participating libraries are stored, and request for a

~ THANK YOU FOR YOUR CO-OPERATION ~

publication from them that will then be sent to you by post)

Appendix 3A Interpreted Results

This questionnaire was distributed to 38 staff members of IWASRI (mainly researchers and engineers). 13 questionnaires were returned, which means a respondence percentage of approximately 34%.

Here the interpreted results are given, and the primary results are inserted in appendix 3B.

Use of information sources (question 1 and 2)

The most used information sources are reports, followed by journals. Less used are papers from proceedings, followed by books. Theses have the lowest priority. Although journals are not the most used source of information, they do contain the most valuable information, followed by reports. Papers from proceedings come a bit further on the list, and the remaining sources contain significantly less valuable information.

Use of IWASRI library (question 3, 4 and 5)

Most of the respondents go to the library about 1 to 4 times a month, which means from once a week up to once a month. The second largest group of respondents comes less often, namely once to three times a quarter. A group of the same size as the last mentioned comes irregularly to the library, because their visit depends on the kind of work or project they are in at that moment.

By far most of the times, they come to the library to borrow or return a publication. The number of times they come to read a publication is only half as great. Only one respondent sometimes comes to the library to request the purchase of a certain publication. There are no other purposes for which they visit the library. The users are moderately satisfied about the results of their visits.

Opinion on the collection (question 6)

Only two of the respondents find that there is no subject on which the library has too little information. The remaining respondents name a wide range of subjects, but there is no subject that is mentioned considerably more than another. Only 'soil physics' and 'farmers participation' are both mentioned twice.

Opinion on the current situation in general (question 7 and 8)

Users find it harder to name positive things on the library than negative. Most of the positive things mentioned concern the relevance of the collection. Other things mentioned are the reasonable service level and the computerized cataloguing system.

Negative remarks are made about (1) the lack of a proper arrangement, (2) insufficient space and the absence of a librarian/lack of sufficient well trained staff and (3) the supposed absence of linking with other libraries.

Desires concerning the future situation (question 9)

A remarkable thing is that the respondents have a great variety in wishes. But when you look at the score list, you can distinguish three 'groups' that differ in scores, and therefore in priority. The first, with the most mentioned items, contains 'public catalogue terminal', 'room for studying and reading' and 'display of fresh arrivals', with only one point difference. The second group contains 'interlibrary loaning system', 'reservation system' and 'question-and-answer system', and scores about 5 points lower than the first group. The third group, containing 'access to Internet' and 'reproduction facility' has a score of approximately 5 points lower than the second group.

Appendix 3B Primary Research Results

Question 1: Please indicate which information sources you use most by appointing numbers 1, 2 and 3 (1 is the source you use the most, 2 the one after that, 3 the one after that) to three items from the following list?

	reports	theses	journals	papers from proceedings	books	other sources
priority 1	XXXXXXXX,		XXXXX	XX		
priority 2	XXX		XX	XXXXX	XXXX	
priority 3	X	X	XXXX	XXXXX	X	
Lower priority		XXX			XXXX	XX

Question 2: Please indicate in which information sources you find the most important/valuable information, by appointing numbers 1, 2 and 3 to three items from the following list?

	reports	theses	journals	papers from proceedings	books	other sources
priority I	XXXXX		XXXXXXX	XX	XX	3047 CC3
priority 2	XXX	X	XXXX	XXX	XX	
priority 3	XXXX			XXXXX	XX	
lower priority		XX		X	X	X

Question 3: How often do you pay a visit to the library?

more than once a week	l - 4 times a month	1 -3 times every 3 months	1 - 4 times a year	never	lrregularly; for special
					occasions
	XXXX	XXX	X	X	XXXX

Question 4: What is (are) the purpose(s) of these visits?

borrowing (or returning) a publication	reading a publication	of a publication that is not in the collection at	Other purpose(s)
XXXXXXXXX	XXXXX	that moment	

Question 5: Are you satisfied about the results of your visits (do you get what you come me for)?

always		sometimes, sometimes not	Seldom	never
	XXXX	XXXXX		

Question 6: Is there any subject on which the library has insufficient information?

Yes, namely	No
 .soil physics (2x) .computer journals .software manuals/handbooks .technology transfer .publications from the International Association of Hydrologists .feasibility and design reports of drainage projects .latest data related to salinity, waterlogging etc. in the form of a database 	XX
.some very useful journals/proceedings.farmers participation (2x)	

Question 7: What do you find a favorable thing about the library in its present state?

No answer: 4 times

Keeping the books in an easily traceable way.

Computerized book keeping system.

Sometimes nobody is present in the library, it is calm and quiet.

Something is better than nothing.

Project reports about feasibility.

Usually I'm able to get what I need.

Relevant material.

Literature/information about SCARPs.

No maximum on the number of items that one can take.

Question 8: What do you find an unfavorable thing about the library in its present state?

It is not adequately facilitated/equipped for consulting the needed reference materials. Upgrading is required in terms of modernizing the library and its materials benefiting the requirement level of an international research institute.

At least one more trained person should be available in the library. Only one person knows the exact places of the books. If he is not available, problems exist. Always many persons talking and reading newspapers and discussing the news.

A great number of books are lying un-arranged.

There is no place to sit for reading and working.

The books, journals and periodicals should be arranged in an alphabetical order.

The publications are not always easy to find.

Non spacious.

Insufficient space.

Not easy to find references.

Not connected with other libraries in Pakistan.

It is unorganized; often nobody is in the library.

Question 9: Please make a priority list of the following changes that could be established to improve the library (add numbers 1 - 8, of which 1 has the highest priority and 8 the lowest)

	Access to Internet	Display of fresh arrivals	Reserva- tion system	Room for studying and reading	Repro- duction facility	Question- and- answer service	Public catalog terminal	Inter- library loaning system
1	XX	Х	Х	XX	Х	XX	xxx	
2	Х	XXX	XXX	Х	Х			XXX
3	Х			xxxx	XX	XXX	XX	
4		XX	XX		XX		XX	XXXX
5	XXXX	XX	Х			XXX		XX
6	XX	XX	XX	Х	XX		XXX	†
7		XX	X	XXXX		XX	XX	Х
8	XX		XX		XXXX	XX	<u> </u>	XX
Final score ¹	49	57	53	58	47	52	59	53

calculated according to the system that one vote with priority 1(the highest) is worth 8 points, and one vote with priority 8 (the lowest) is worth 1 point.

Appendix 4A Checklist for Network Libraries

Staff

Number of staff members. education.

Target groups

Collection

collection size. collection subject area. acquisition.

Cataloguing and classification

cataloguing system (manual or computerized; kind of system). classification system(s).

Computerization

number and type of computers.

Finances |

budget.

Output and services

library publications and frequency and reach of them. services and facilities.

Contacts

type of contact(s) with whom. consequences of each of those contacts.

Appendix 4B Completed Checklists

WAPDA CENTRAL LIBRARY

Staff

Number of staff members

- 1 librarian
- 1 librarian assistant
- 1 library attendant
- 1 typist
- 1 book binder

Education

librarian:

M.Sc. Library Science

library assistant:

Diploma from a 6 months library course at the National

Library

Target groups

Only WAPDA staff members can become library member and borrow books. Anyone else is allowed to visit and use the facilities on the spot.

Collection

collection size
13,000 books
8,000 reports
16 subscriptions to international journals
100 videotapes

Collection subject area

Mainly on water and power, but also on relating and general fields

Acquisition

The Library Management Committee decides on the purchase of each book, advised by the librarian who regularly receives lists of fresh arrivals from renowned local booksellers. No foreign purchases.

Cataloguing and classification

Cataloguing system (manual or computerized; kind of system) as well manual as computerized. Manual: card catalogue with entries on author, title and subject. Computerized: using SciMate software, donated by NADLIN. Using the NADLIN template. Only books are catalogued. Reports are only stored. Journals are manually registered.

Classification system(s)

Books are arranged by DDC, journals by title and reports by accession, although there is no registration on that like stock book.

Computerization

Number and type of computers.

One pentium with e-mail connection, laser printer and CD-ROM drive, mostly used for typing purposes, and one 486 used as a catalogue terminal (not public)

Finances

Budget

No specific budget; the Library Management Committee decides on special expenditures. WAPDA is the only source of budget.

Output and services

Library publications and frequency and reach of them a list of fresh arrivals and tables of contents from the latest journal volumes. Both monthly. They are sent to all chief engineers and all department- and formation heads within WAPDA.

Services and facilities

A photo copying machine for public use (1/4 of a rupee per copy), 7 CD-ROMs that can be consulted on the librarians' computer, room for studying and reading, a television with VCR. Also a micro fiche reader, but because there are no micro fiches, this facility is out of use.

Contacts

Type of contact(s) with whom.

Contacts without engagement with libraries from WAPDA departments, and participation in the NADLIN network.

Consequences of each of those contacts

The contacts without engagement are used for exchanging publications (although they have no central database). No active contribution to the network is paid at this moment.

CENTRE OF EXCELLENCE IN WATER RESOURCES ENGINEERING

Staff

Number of staff members

I librarian, I library clerk and I library attendant

Education

Librarian:

M.Sc. in Library Science

Library clerk and attendant:

No library education

Target groups

Everybody can enter the library and use the facilities on the spot. Students can also borrow books from the book bank.

Collection

Collection size books, reports and journals. collection subject area everything on water resources.

Acquisition

theses from CEWRE and the University of Engineering and Technology, reports through exchange agreements, books from the British Council under the Scheme "Books and Information Grants under CEWRE/Birmingham Link Project". CEWRE has no influence on which books it will get from the British Council.

Cataloguing and classification

cataloguing system (manual or computerized; kind of system) manual, on several entries like author and title. Currently, the collection is being computerized using SciMate software, donated by NADLIN. The NADLIN template is used as well.

Classification system(s)

books on DDC, reports alphabetically on institution name, journals on title.

Computerization

Number and type of computers

one 486 and one 386, both in use for computerization of the collection.

Finances

Budget

overhead costs are paid by CEWRE. New books are obtained through the British Council (see under 'acquisition').

Output and services

Library publications and frequency and reach of them

List of journals (closed/ongoing)

List of new research reports

List of theses and dissertations

List of seminars, workshops, short courses etc.

List of publications in the book bank (those can be issued)

The above named lists are only on display, and yearly updated.

Bimonthly list of current contents (on display)

Quarterly list of fresh arrivals (sent to sister organizations)

Services and facilities

Room for studying and reading, photocopying machine for public use, book bank for students.

Contacts

Type of contact(s) with whom

Contacts without engagement and participation in the NADLIN network.

Consequences of each of those contacts

Contacts without engagement for exchange agreements. Contribution to the central NADLIN database by sending the current awareness bulletin to NADLIN.

IRRIGATION RESEARCH INSTITUTE

Staff

Number of staff members

No librarian, I library assistant, 3 library attendants, 1 library director

Education

The library assistant has a very limited, unclear kind of education

Target groups

Everybody can enter the library, but only research scientists and engineers from the Punjab Irrigation and Power Department can be issued books.

Collection

Collection size

5,000 books

2,600 technical journals (local)

6,000 technical journals (foreign)

2,000 memoirs

2,000 technical reports

200 special papers published

In the past, IRI library had a much larger budget to spend. Now, only a few books a year can be purchased, and it only subscribes to local journals, free of cost. Reports and theses are acquired through exchange agreements with sister institutions.

IRI also has a very old collection (from 1924) on irrigation, but this is stored in a closed archive, where the publications will most likely decay if nothing is done about it.

Collection subject area

Hydraulies and physics, and land reclamation in a small annex in Lahore.

Acquisition

on an annual basis, only a few local books can be purchased, on which is decided by the library director.

Cataloguing and classification

cataloguing system (manual or computerized; kind of system)

manual card catalogue. 2,000 records were computerized using SciMate software given by NADLIN, but then the computer broke down and so far, no budget has become available to have it repaired.

Classification system(s)

Self made subject classification. But from the moment there was no librarian anymore, the classification has stopped, and the books are only registered in stock book.

Computerization

Number and type of computers One 386, out of use.

Finances

Budget

The budget comes from the Punjab Irrigation and Power Department, but is very small, much too small to cover regular library affairs.

Output and services

Library publications and frequency and reach of them annually, a list of fresh arrivals is published.

Services and facilities

Room for studying and reading. The photocopying machine is out of order.

Contacts

Type of contact(s) with whom

contacts without engagement with sister organizations, and participation in the NADLIN network.

Consequences of each of those contacts

Contacts without engagement for exchange agreements. IRI library has once given information on the whole collection to NADLIN, but never sent an update.

NATIONAL DOCUMENTATION CENTRE, LIBRARY AND INFORMATION NETWORK (NADLIN)

Staff

Number of staff members

1 librarian, 1 documentalist, 1 computer expert, a few library attendants and typists

Education

Librarian: M.Sc. in Library Science

Target groups

Researchers, engineers, government officials, students, employees of Pakistan Council of Research in Water Resources (PCRWR) and collaborators from Islamabad.

Collection

collection size

9,000 books and reports

7,850 monographs/analytics on microfiche

297 scientific/technical journals holding titles

12 subscriptions to technical journals

Collection subject area

Water resources

Acquisition

Books (as well local as foreign) and journals are purchased through PCRWR budget, and decided upon by the librarian.

Cataloguing and classification

Cataloguing system (manual or computerized; kind of system)

books and reports computerized with INMAGIC software. The database also contains bibliographic descriptions of publications available in collaborating libraries, so that the total number of descriptions is over 40,000.

Classification system(s)

Computerization

Number and type of computers

A few pentiums and a few older types of computers for all computerized databases, for typing purposes and for e-mail

Finances

Budget

PCRWR for all expenditures

Output and services

Library publications and frequency and reach of them

Monthly list of fresh arrivals

Bimonthly list of current contents from foreign technical journals

Quarterly publication about development of technologies in the field of water resources world wide

Bi-annual publication containing indexes and abstracts of reports and research studies, for researchers and engineers who require to review the work already done or in progress in their subject fields.

Bi-annually list of holdings of scientific and technical journals on water resources available with the libraries of 40 different institutions in Pakistan. Bi-annual publication containing research articles of scientists, engineers and research professionals in the field of water resources.

Monthly newsletter about the activities of PCRWR, and a list of fresh arrivals in NADLIN library.

Services and facilities

Room for studying and reading

Microfiche reader and microfiches (see under 'Collection')

Question-and-answer service

Journal circulation within PCRWR

Repro copying service (also on telephone- or electronic request)

E-mail connection

Internet connection

Development and maintenance of the following databases:

National bibliographic database on water and environment

National database on current research studies/projects

National database on periodical holdings

National database of hydrologists, water resources engineers and environmental experts.

Database of databases

Providing access to the following CD-ROMs:

AGRIS (on agricultural disciplines)

AGRICOLA (on agricultural disciplines)

Selected Water Resources Abstracts (on water resources management, planning and development)

WATERLIT (on water resources, environment and sanitation)

ICOLD (on world's largest dams)

Providing access to the following regional databases:

ENSIGNET (on environmental sanitation)

CEHANET (on public health, sanitation and environment)

Providing access to the following national databases:

CATPAK (on Pakistan agriculture) SDPI Library database

Contacts

Type of contact(s) with whom

Being a coordinating center for network: contacts with several libraries in the field of water resources, and for the Environmental Sanitation Information Network, and contacts without engagement with other organizations of the Ministry of Science and Technology.

Consequences of each of those contacts

Collecting information on their collections, research and experts working with them.

PAKISTAN FORESTRY INSTITUTE

Staff

Number of staff members

1 librarian

Education

M.Sc. in Library Science

Target groups

Students and staff members of Peshawar University can borrow the publications. Others can use the facilities on the spot.

Collection

Collection size

several thousand books and theses

Collection subject area

Forestry

Acquisition

By the librarian, through budget from the NWFP Agricultural University, Peshawar.

Cataloguing and classification

Cataloguing system (manual or computerized; kind of system) computerized with CDS-ISIS software

Classification system(s)

Oxford University Classification on forestry

Computerization

Number and type of computers one 486 with CD-ROM player

Finances

Budget

Only from the University, and just sufficient for the current tasks and facilities

Output and services

Library publications and frequency and reach of them

Quarterly Pakistan Journal of Forestry, sent to sister institutions in relating fields

Services and facilities

Room for studying and reading, photo copying machine, Tree CD-ROM

Contacts

Type of contact(s) with whom Network contacts with NADLIN and PARC Consequences of each of those contacts Sends updates of the collection on floppy disk to PARC.

MAIN LIBRARY OF FAISALABAD AGRICULTURAL UNIVERSITY

Staff

Number of staff members

33

Education

1 librarian who is professor in some agricultural subject

1 assistant librarian: M.Sc. Library Science few library assistants: B.Sc. Library Science

few library attendants: Diploma from six months Library Course at National Library

Target groups

Students and staff members only

Collection

Collection size

81,400 books of which 28,890 in the book bank

10,165 theses (M.Sc./Ph.D.)

13,985 journal volumes bound

385 World Bank reports

571 FAO reports

113 journal titles full text on micro fiche

Collection subject area

All fields within agriculture (like soil science and veterinary science)

Acquisition

From large booksellers publishers throughout Pakistan, by an acquisition committee consisting of 4 members from different disciplines within the university.

Cataloguing and classification

Cataloguing system (manual or computerized; kind of system)

Manual card system for books. Each book has entries on title, dictionary, author and subject. Theses in INMAGIC, as well as 6,000 of the books (estimated duration of computerizing all books: 2 or 3 years)

Classification system(s)

DDC

Computerization

Number and type of computers

Two 386 PC's. One for cataloguing in INMAGIC, one for consulting CD-ROMs by library users. Five pentiums will arrive on short term, for speeding up the cataloguing, and for use as public terminals.

Finances

Budget

University only for all expenditures

Output and services

Library publications and frequency and reach of them No publications

Services and facilities

Book bank; a collection of (many copies of) books used in colleges, that students can borrow for several months, for the charge of 1 rupee of a month.

circulation of journals among staff members (after circulation, they are displayed in the library).

Photo copying section

Audio visual section (micro fiche reader, micro film projector, television, VCR, micro film studio for making and developing micro films)

room for studying and reading

reference section

Contacts

Type of contact(s) with whom

Nuclear Institute for Agriculture and Biology (NIAB), PARC, NARC, NADLIN and others

Consequences of each of those contacts

Exchange of materials on loan basis, and exchange of data on journal subscriptions with PARC, NARC and NADLIN.

Appendix 5 Suggestion-for-Purchase Form

Library SUGGESTION FOR PURCHASE

When there is any publication of which you collection, please complete this form. Whenotified.	nen your request is granted, you will
Data on member:	
Name:	
Data on publication to be purchased:	
Title:	
Author:	
Publisher:	
Year of publication:	
ISBN number:	
Available in Pakistan: no/yes, namely at: .	
Price:	
Date:	Signature of membe
This part to be filled in by the library dir	
Granted / not granted	
Date: Signature of	f library director:



International Waterlogging and Salinity Research Institute Home Page



Search



Download



Feed Back



IWASRI RESEARCH



Furners Participatation



Environment





Dramage



Modelling



Canal Lining



National Research

National Library Collections

International Research

JWASRI Library Collection