

Development of the Library of National Institute of Hydrology, Roorkee : A Librametric Study

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[Quantity and quality of research depend on the selective, pinpointed, exhaustive, efficient documentation and information (SPEEDI) services covering the treasure of knowledge available at an easily accessible place i.e., - Library. The study of progress of various organs and services of a library provide an opportunity of introspection of achievements and/or shortcomings. Such study is necessary periodically in order to review and modify various extent library management practices in order to provide a better facility and service to the research workers. The planners of National Institute of Hydrology realized the need of a good research and reference library and one of the major objectives of the national Institute of Hydrology is "to establish and maintain a research and reference library and equip the same with books, reviews, magazines, newspapers and other relevant publications", obviously to serve the hydrologic community. To achieve this objective NIH established its library in the year 1979. It has been performing all necessary and allied activities over the years which are being presented. The yearwise progress of the library with the addition of books, bound volumes of journals, current periodicals, technical reports, computer manuals, Indian and foreign standards, maps and other kinds of book and non-book material is statistically analyzed and discussed in the paper. Library services and future plans are also highlighted. With the advancement of information technology, the library has also entered in computer application to its activities and services.]

1. Introduction :

Libraries, which in the modern sense of the term are called as Information Centres play a significant role in improving educational standards and quality of research. Librarian's traditional role and function of collecting and storage of knowledge in a helpful, systematic and scientific manner for posterity is fast changing to that of dissemination of knowledge to potential users at the time of emergence and need without any loss of time. In other words speedy and timely access to knowledge or information to scientists, researchers and technologists is the call of the day and librarians have to meet this demand by taking the help from modern gadgets, mechanical devices and scientific inventions in electromagnetism, photography, audio-visuals and telecommunications. The impact of this fast changing concept of library and its function is most apparent in research and technical libraries and crucial

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for libraries catering for the research workers in various scientific and technical subjects.

1. Library and its Contribution :

Library is a backbone of research organisation and it can be rightly said that without library neither a research project can be selected nor current one can be completed or completed project can be reported well without timely and proper information flow at all stages of decision making². The planners of National Institute of Hydrology had realized the need of a good research and reference library. As defined in the Memorandum of Association, one of the major objectives of the National Institute of Hydrology is "to establish and maintain a research and reference library and equip the same with books, reviews, magazines, newspapers and other relevant publications," obviously to serve the hydrologic community. To achieve this objective NIH established its library in the year 1979. NIH Library is effectively contributing towards the fruitful R & D activities at the institute and also stand as information clearing house in the field of hydrology and water resources for other organisations in the country.

Trends of Library Progress :

A. Collection Development :

Table 1 shows the continuous early progress in collection development since 1978-79. Books, bound volumes of periodicals, books of Central Govt. rules, computer manuals, technical reports, Indian and foreign standards, reprints, maps and microfiches are categorized separately. Research is mainly guided through information contained in these documents. It can be observed from the table that there were only 24 books in the year 1978-79 and after five years of the establishment of the library the collection reached upto 4385 documents including 28 microfiches. Again after next five years upto the year 1987-88 the NIH library collection reached upto 10,158 documents and till the year 1992-93 there were 13,235 documents in the library. Now NIH library has 14,338 documents in its holdings. The collection includes 4838 books, 386 bound volumes of periodicals, 396 rules books, 442 computer manuals, 3002 technical reports, 298 Indian and foreign standards, 960 reprints, 1975 maps and 41 microfiches. Besides the scientific

literature, the library has a Hindi Section and about 600 literary, religious and technical books are kept for the use of the readers in this section. Fig.1 shows the steady growth of development NIH Library.

The libraries of NIH Regional Centres have been established in the year 1991 and so far 1075 books have been transferred at Regional Centre Libraries.

B. Progress of Journals

Journals are mostly the first hand documented records of original research and form the primary source of information. They constitute the bulk of the literature in any discipline and serve as the forum where different intellectual contributions are made by different authors and carry current information in the respective subject field.

Study of items published in a journal may reveal the state and status of the subject field to which the journal belongs or the state and status of the journal in the background of the state of research activities in the subject field. NIH library has a very rich collection of journals in the field of water resources. Our scientists are very fortunate that almost all the eminent journals published in the field of hydrology and water resources are available at one place. Table 2, corresponding to Fig.2 gives an account on year-wise progress of receipt of journals in NIH library. In the year 1980 there were only 27 journals. The number of journals increased year after year and in the year 1992 the number of these journals becomes 90. In 1993, 17 journals were discontinued on various reasons. NIH Library is subscribing 74 journals and out of them 40 journals are of foreign origin. The important hydrology related Journals are "Journals of Hydrology", "Water Resources Research", "Advances in Water Resources", "Ground Water", "Hydrological Process", "Hydrological Sciences Journal", "ASCE Journal of Hydraulic Engineering", etc.

3. Budget Allocations :

It has been rightly observed that "Money makes the Cart go". Money and financial provision for any library shows the importance of that library. NIH Library is not an exception to this rule.

Table 3 corresponding to Fig.3 gives budget allocations for the purchase of books, and subscription of Indian and foreign periodicals from 1978-79. The expenditures on purchasing of technical reports, maps, standards and microfiches etc are included in the expenditure of books. In the primary stage it was only 10,000.00, and increased year after year. The sudden jump in expenditure can be seen in the year 1991-92 and 1992-93. The reason behind that multiple copies of books and some journals were purchased for NIH Regional Centres in these years. Now the total value of books in NIH Library including its Regional Centres is Rs. 33, 91, 311. 80 and of periodicals is Rs. 24, 07, 514.00.

4. Readership :

The library is mainly a service oriented organisation, which disseminates information through various documents received in the library.

Users are the important component of a library system. If there is no user there is no need of a library. NIH Library is quite lucky in this regard. Though Roorkee is a small town, it has a good number of Government organisations. Irrigation Research Institute, Irrigation Design Office of U.P. Government; various departments of University of Roorkee; - Hydrology, WRDTC, Earth Sciences, Civil Engineering, University Service and Instrumentation Centre, etc. are situated very near to NIH. Though each one of them has their own library, but a good amount of readership and users visit NIH library regularly for the reasons of easy availability of excellent, continuous and varied literature exclusively on hydrology and related topics in one place.

All the scientists and almost all the staff members of NIH hold the library cards for getting the library documents. Normally about 50 readers in a day visit in the library for consultation purposes. Out of them about 10 readers are from other organisations. For a good library such number of readership is very low.

5. Resources Sharing :

Resource sharing is nothing but sharing of library resources by the participating libraries among themselves on the basis of the principle of cooperation. In such a cooperative

venture it becomes possible for a user in any of the participating libraries to make use of the resources of others. Thus, through resource sharing consortium, libraries can improve the total collection of reading material, consolidate their technological capabilities, improve their dissemination tools and extend their information services to a larger user community.⁴

As stated in the preceding section that there is a good number of academic, research and field organisations dealing with water resources in Roorkee. As such it is quite natural that a good interaction will be made with the libraries of these organisations. NIH Library maintain good resource sharing relations not only with the libraries of the local institutions but also with libraries of the adjacent towns. It maintains rapport and liaison with other libraries on inter-library - loan on reciprocal basis. The services of Central Library, University of Roorkee are being utilized also by the scientists of NIH on individual basis. Similarly all the faculty members of the Department of Hydrology, University of Roorkee are members of NIH Library. Besides these services about 100 books in a year are usually being issued or received from other libraries on Inter Library-Loan basis.

6. Staff Position :

The staff is an essential organ that keeps the system moving. The library work and services are dependent on this organ. The success and progress of the library services can be increased or curtailed on the basis of the availability of proper staff. Unfortunately the library has been awfully understaffed from the very inception. From the beginning, all the library activities are moving on the shoulders of only one technical personnel, with one or two supporting staff. Due to scarcity of professionally qualified staff some very important hydrological information dissemination activities and services either could not be started or stopped after some initial progress.

7. Computer Application :

Today, libraries in India are increasingly using computers and related technology to improve the efficiency and effectiveness of their information services. This in turn has stimulated interest in networking, sharing of information and exchange of database records among libraries. NIH Library has adopted

modern information technology upto some extent. A very useful package known as CDS/ISIS (Computerized Documentation Service/Integrated Set of Information Systems) developed by the UNESCO for designing and maintenance of bibliographic data bases has been obtained in NIH Library from National Information System for Science and Technology (NISSAT), the National Distributor of UNESCO. Using this package one database of books related with ground water hydrology had been completed. Another database of books related with surface water hydrology is in progress and going to be completed very soon. Other such sub-themes will also be added.

8. Future Programmes :

It is hoped that the Institute will provide sufficient trained manpower in near future. If so, the library is planning to computerize all the in-house and information dissemination activities. Library will start soon, the Current Awareness and Selective dissemination of Information (SDI) Services in Hydrology, so that our Regional Centres and other related organisations can be benefitted with the latest developments. After completion of the bibliographic databases, these databases will be provided to our Regional Centres so that scientists working at Regional Centres can search the documents of their choice with ease.

9. Conclusion :

The NIH Library has grown during the past sixteen years and has earned the competence of providing information services necessary for research in hydrology. It can serve the users community comprising of its own users, other research organisations of the country and abroad, consultants and private practitioners at all points of reference and information through documents in the field of Hydrology and related subjects.

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TABLE -2 : YEARWISE PROGRESS OF JOURNALS

Sl. No.	Year	No. of periodicals added		No. of Periodicals deleted		Total No. of Periodicals		
		Indian	Foreign	Indian	Foreign	Indian	Foreign	Both
1	1980	9	18	-	-	9	18	27
2	1981	2	3	1	3	10	18	28
3	1982	2	3	-	1	12	20	32
4	1983	2	4	-	3	14	21	35
5	1984	-	1	-	1	14	21	35
6	1985	3	2	-	-	17	23	40
7	1986	3	-	1	1	19	22	41
8	1987	2	7	3	1	18	28	46
9	1988	11	14	1	1	28	41	69
10	1989	10	3	2	2	36	42	78
11	1990	4	4	4	-	36	46	82
12	1991	2	3	1	2	37	47	84
13	1992	9	2	3	2	43	47	90
14	1993	-	-	9	8	34	39	73
15	1994	-	1	-	-	34	40	74

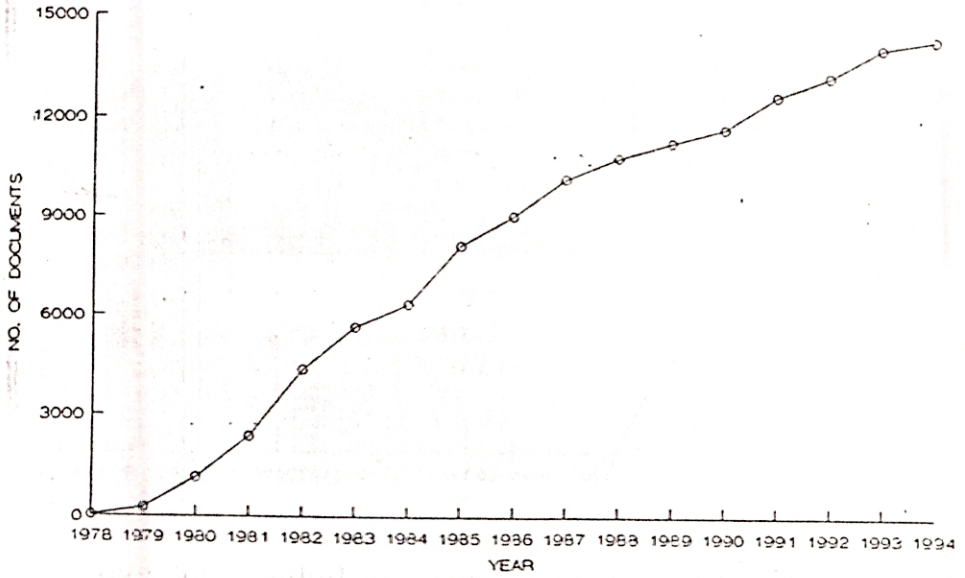
TABLE - 1 : YEAR-WISE ADDITION OF VARIOUS DOCUMENTS

Year/ Type of docu- ments added	Books	Bounded vol. of period- icals	Rules books (for Admn.)	Computer manuals	Technical Reports	Indian & Foreign Standards	Reprints/ Papers	Maps/ Topo- sheets	Micro- fiches	Total No. of docu- ments	Cum- ulative No. of Docu- ments
1978-79	24	-	-	-	-	-	-	-	-	24	24
1979-80	178	-	-	-	13	-	41	-	-	232	256
1980-81	167	-	23	-	487	-	178	40	-	895	1151
1981-82	543	-	7	-	269	81	270	24	20	1214	2365
1982-83	846	82	11	252	281	-	230	310	8	2020	4385
1983-84	518	54	44	58 ^o	204	-	149	250	1	1278	5663
1984-85	325	-	28	5	164	100	44	30	1	637	6360
1985-86	329	100	40	97	147	44	17	1013	-	1787	8147
1986-87	221	-	30	30	331	20	2	251	11	896	9043
1987-88	579	100	22	-	368	-	18	28	-	1115	10158
1988-89	418	-	71	-	121	1	10	19	-	640	10798
1989-90	365	-	20	-	68	-	1	10	-	464	11262
1990-91	324	50	7	-	38	-	-	-	-	419	11681
1991-92	943	-	6	-	36	-	-	-	-	985	12666
1992-93	522	-	8	-	39	-	-	-	-	549	13235
1993-94	411	-	1	-	425	-	-	-	-	837	14072
1994-95	125	-	78	-	11	52	-	-	-	266	14338
Total No. of Docu- ments	6838	386	396	442	3002	298	960	1975	41	14338	-

TABLE -3 : YEARWISE PROGRESS OF JOURNALS

Sl. No.	Year	Expenditure for books (Rs.)	Expenditure for Periodicals (Rs.)	Total (Rs)
1	1978-79	10,038.73	-	10,038.73
2	1979-80	16,688.48	-	16,688.48
3	1980-81	28,594.52	17894.66	46,489.13
4	1981-82	82,781.10	35,908.66	1,18689.76
5	1982-83	99,227.10	17,486.75	1,16,713.85
6	1983-84	80,155.69	23,457.30	1,03,612.99
7	1984-85	64,371.27	31,352.10	95,723.37
8	1985-86	1,30,291.87	42,283.00	1,72,574.87
9	1986-87	1,11,221.64	70,344.20	2,13,104.95
10	1987-88	1,42,129.25	70,975.70	2,13,104.95
11	1988-89	1,63,777.57	1,15,520.00	2,79,297.57
12	1989-90	1,69,202.70	1,54,139.90	3,23,342.60
13	1990-91	1,75,611.10	2,87,290.00	4,62,901.10
14	1991-92	8,47,088.00	4,05,933.85	12,53,021.85
15	1992-93	8,11,651.61	7,96,073.00	16,07,724.60
16	1993-94	4,11,506.21	3,38,855.00	7,50,361.21
17	1994-95 (up to Nov. 19994)	46,975.09	-	46,975.09
	TOTAL	33,91,311.90	24,07,514.00	57,98,825.80

FIG.1: YEAR-WISE ADDITION OF DOCUMENTS



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FIG.2 : YEAR-WISE PROGRESS OF JOURNALS

