TWENTY EIGHTH ALL INDIA LIBRARY CONFERENCE

Seminar Papers on

1 Public Libraries in a Developing Society
2 Planning for National Information System for India

INDIAN LIBRARY ASSOCIATION
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TWENTY EIGHTH ALL INDIA LIBRARY CONFERENCE

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Seminar Papers

1 Public Libraries in a Developing Society
2 Planning for National Information System

Edited by

J L Sardana
Mohinder Singh
O P Trikha
N N Mohanty

THE INDIAN LIBRARY ASSOCIATION
A/40-41, Flat No 201, Ansal Building
Dr. Mukherjee Nagar
Delhi 110 009

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Editorial Committee

J L Sardana	(Convener)
Mohinder Singh	Member
O P Trikha	Member
N N Mohanty	Member

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FOREWORD

While selecting the two topics for the XXVIII All India Library Conference it was strongly felt that since the Indian Library Association has membership representing various types of libraries, documentation centres and library schools the topics should be of wider as well as current interest. The two topics finally selected therefore should satisfy these considerations.

Public Libraries undoubtedly are important social institutions because they play an indispensable role as community eentres for education, information recreation and culture. They provide free service to all without any discrimination whatsoever and try to reach as many users as possible through all possible media including postal system, book-mobile vans, deposit centres and through various extension activities. Their role in a democracy needs hardly to be emphasised and they play a vital role in a country's programmes for development and national reconstruction, particularly in areas such as education, spread of literacy and utilization of leisure time in gainful activities. Their positive role in literacy programmes has been well recognised and demonstrated in developing countries all over the world including India. It is hoped that the present National Adult Education Programme (NAEP) would pay proper attention to their role otherwise it is feared that in the absence of proper library services most of the neo-literates would gradually relapse into illiteracy. The Union Government and the governments at the state level should in order of priority, therefore, take all possible steps to establish a system of public libraries all over the country.

The explosion of knowledge and the consequent increase in the amount of information particularly after the World War II has virtually made it impossible for any library, howsoever generously supported financially, to be really comprehensive in its document collections to meet the varied and complex needs of its users. In addition, the steep rise in the cost of books, periodicals and other publications particularly those imported from the developed countries have created serious financial problems for libraries in the developing countries. There is therefore an urgent need in those countries to utilise the available limited financial resources in a most effective and economical manner. For this purpose it is essential to implement concepts such as Resource Sharing, Networking, etc. with the aim that any one living anywhere may have access to the information resources of the country, region and even the whole world.

Computers and other telecommunication media have already come into vogue in a big way and they can certainly supplant the traditional practices of information processing and dissemination for better, quicker and efficient information services by library and information systems. It is really urgent that due thought be given to their usefulness in our libraries and information centres particularly because of the fact that the information industry in this country has already developed various gadgets such as micro-processors, etc. which are available at comparatively lesser cost and can be used by them for better results.

It is really heartening to note that 46 papers have been received for this conference. We plan to publish the proceedings of the conference as well in near future. I do hope that the discussions in the Conference would be really fruitful resulting into important recommendations for future action.

It bringing out this publications members of the Editorial Committee have really worked very hard. On behalf of the ILA, I extend to them sincere thanks. We are really thankful to Raja Rammohan Roy Library Foundation, ICSSR and DST for their timely financial assistance for the Conference. Also our thanks to the advertisers who have very kindly assisted us by giving their advertisements for this publication. Last but not the least our sincere thanks are due to M/S Hindustan Publishing Corporation, Delhi for bringing out this publication in the best possible format and also in the shortest possible time.

PROFESSOR P B MANGLA
PRESIDENT
Indian Library Association

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LIST OF CONTRIBUTORS

S P AGRAWAL
Director,
Social Science Documentation
Centre, ICSSR
35, Feroz Shah Road
New Delhi 110 002

WAJIH AHMAD ALVI
Lecturer
Department of Library and
Information Science
University of Kashmir
Srinagar 190 006

ABDUL MAJID BABA
Iqbal Library
University of Kashmir
Srinagar 190 006

NANDA DULAL BASAK
Indian Statistical Institute Library
208, B T Road,
Calcutta 700 035

M BAVAKUTTY
Head
Department of Library & Informa-
tion Science,
University of Calicut
Calicut 673 635

G D BHARGAVA
Head of the Department
Department of Library and
Information Science
Vikram University
Ujjain 456 010

BIPUL KUMAR CHAKRABORTY
Librarian
Zoological Survey of India
Calcutta 700 016

N B CHOUDHURY
Assistant Librarian
Regional Engineering College
Rourkela

BINOD BIHARI DAS
Indian Statistical Institute Library
202 B T Road
Calcutta 700 016

S DUTTA
Librarian
International Crops Research Institute
for the semi-arid Tropics
(ICRISAT)
Patancheru, (A P) 502 324

Ms A J GANDHI
Librarian
Indian Bank's Association
Stadium House 6th Floor Block 3
Veer Nariman Road
Bombay 400 020

Ms SUSILA GANESAN
Lecturer
Regional Institute of Library Science
District Central Library
Madurai

GIRISH CHANDRA
Kurukshetra University
Kurukshetra 132 119

Ms Khin Thet Htar
N 12, Panchsheel Park
New Delhi 110 017

N B Inamdar
Librarian
Osmania University
Hyderabad 500 007

M K Jain
Chief Librarian-cum-Documentation
Officer Planning Commission
New Delhi 110 001

Ms Sarita Jain
Non Collegiate Women's Education
Board
University of Delhi
Delhi 110 007

Janak Raj
Deputy Librarian
Kurukshetra University
Kurukshetra 132 119

S C Joshi
Assistant Librarian
Research and Control Laboratory
Rourkela Steel Plant
Rourkela 769 011

K K Kamal
University Librarian and Director
Institute of Library Science
Lalit Narayan Mithila University
Darbhanga 846 004

Noorul Hasan Khan
Head
Department of Library and
Information Science
University of Kashmir
Srinagar 190 006

M B Konnur
Lecturer
Department of Library and
Information Science
University of Poona
Pune 440 007

P S G Kumar
Lecturer and Head
Department of Library Science
Nagpur University
Nagpur

Ms C B Limaye
Assistant Librarian
South Gujarat University
Surat 395 007

M B Lonkar
Librarian
College of Engineering
Farmaguli 403 405

P B Mangla
Department of Library and
Information Science
University of Delhi
Delhi 110 007

Surendra Nath Mehta
Scientist
Desidoc
New Delhi-110 454

Tarun Kumar Mitra
Lecturer
Department of Library Science
University of Calcutta
Cacutta

M A Nayeem
Librarian
TNB College Library
Bhagalpur 812 002

PRAHALLAD PANDA
Assistant Librarian
Sambalpur University
Sambalpur 768 017

B D PANDEY
Librarian and Documentation officer
International Cooperation Alliance,
Regional Office and Education
Centre Bonow House
43 Friends Colony
New Delhi 110 065

BAMAN PARIDA
Assistant Librarian
Utkal University
Bhubaneswar

H N PRASAD
Lecturer
Department of Library and
Information Science
Banaras Hindu University
Varanasi 221 005

ROSHAN RAINA
Librarian
Wadia Institute of Himalayan
Geology
Dehradun 248 001

RAM TIRTH
University Librarian
G B Pant University of Agriculture
and Technology
Pantnagar (U P) 263 145

L S RAMAIAH
Librarian
C I E F L
Hyderabad 500 007

V K RANGRA
Scientist
Desidoc
Delhi 110 054

Ms SHALINI REWADIKAR
Teacher Fellow
Department of Library and
Information Science
University of Delhi
Delhi 110 007

J L SARDANA
Lecturer
Department of Library and
Information Science
University of Delhi
Delhi 110 007

R S SASTRY
President
Institute of Library Science
Hyderabad 500 007

R S SAXENA
Librarian
Roorkee University
Roorkee

S M SHAFI
Iqbal Library
University of Kashmir
Srinagar 190 006

U R SHARMA
Scientist
Desidoc
Delhi 110 054

D S SHRIMALI
Assistant Professor in Library Science
Department of Library Science
University of Udaipur
Udaipur 313 001

K K TANEJA
Department of Library and
Information Science
University of Delhi
Delhi 110 007

R THIAGARAJAN
Director
Department of Science & Technology
New Mehrauli Road
New Delhi

G L TREHAN
1359, Sector, 15B
Chandigarh 160 015

VIRENDRA TRIPATHI
Head, Curriculum and material
Preparation Section
Literacy House,
Lucknow 226 005

K M UJLAMBKAR
Director
Directorate of Libraries, Maharashtra
Bombay

S L VERMA
Documentation Officer
National Council of Educational
Research and Training (NCERT)
Sri Aurobindo Marg
New Delhi 110 016

G Y WESLEY
Indian Farmers Fertilizers
Cooperative Ltd.,
34, Nehru Place
New Delhi 110 019

A I H ZAIDI
Librarian
Regional, Engineering College,
Hazrat Bal, Srinagar 190 006

COOPERATIVE LIBRARY AND INFORMATION SERVICE : PRESENT STATUS

G Y WESLEY
B D PANDEY

1 INFORMATION AND INDIAN COOPERATIVE MOVEMENT

Information has come to occupy an increasingly dominant economic and social role in our society. It is regarded as a vital resource and input in all spheres of development and growth of a country; and an effective information system is increasingly considered as an indispensable infra structural facility.

Cooperatives enjoy a pride of place in the mixed economy in India. They are regarded as powerful instruments to transform the economy of the country and secure socio-economic justice to the greatest number of people.

The cooperative movement in India has diversified its activities to a considerable extent. In terms of size it is one of the biggest in the world comprising of about three hundred thousand cooperative societies of various kinds and at various levels with membership of over one hundred million. The share capital is of the order of Rs 10,000 million rupees and the working capital is about Rs 100 million. The activity covers various sectors of socio-economic interests of the serving masses, the main thrust being in the field of agricultural credit, marketing, processing, storage and distribution of agricultural inputs and other requisites. The extent of involvement of the cooperative sector in the national developmental activities demands that adequate infra-structure for information and documentation services be provided for speedy and successful achievement of the cooperative's aims and objectives. This paper aims to identify the different types of information requirements of the cooperatives and pleads for the setting up of adequate library, documentation and information services.

2 WHY INFORMATION SERVICE FOR COOPERATIVES?

2.1 Cooperation is a Discipline

'Cooperation' satisfies all the criteria that mark a discipline and has now come to be regarded as a discipline in its own right. A quick glance at the structure and growth of cooperative activity shows that it has undergone a systematic pattern of development that characterises a discipline. It has established :

(i) normative principles and laws;
(ii) extensive education, training research and extension programmes and institutions for the same;
(iii) forums of exression through congresses, symposia, seminars, workshops etc. for exchange of information;
(iv) wide ranging industrial activity based on cooperative philosophy and hence commercially viable for the benefit of a large section of the society;
(v) a national cooperative policy;
(vi) Cooperative figures as a major sphere of activity in national and international development and gets regular resource allocation;
(vii) professional associations for advancement of the discipline and continuing education; and
(viii) generates considerable amount of information and literature.

Cooperation has gained due attention in almost all fields of activity and extensive action programmes have been launched at various levels, except perhaps, in one latent but nevertheless very important field i.e., library, documentation, information services—corresponding to the last of the above mentioned criteria for recognition of the subject as a discipline. The role of information services appears to have been pushed to obscurity or grossly neglected.

Cooperation is an applied and growing discipline and as such the role of information is crucial to its development and advancement. Lack of adequate infra-structural facilities for bibliographical control of the cooperative literature would leave the cooperative officials groping in the dark for information. Information not harnessed and organised is information lost. It is perhaps time to appreciate the situation in the right perspective and initiate action to develop organized information services and alleviate long term effects of information bankruptcy.

2.2 Need for Information Services

One may well ask about the need for organised information services involv-

ing investment of money, time and effort, while the cooperatives have been functioning without strongly feeling the need for organised information services. The need has always been there but not felt because the quantum of information available was small and easily manageable. Relatively the size of the cooperative organisations was also small. Cooperative executives have been somehow able to muster necessary information from one source or other or from wherever it had been generated and use it in their work. The fourth law of library Science says 'Save the time of the Reader'. The Cooperatives executive must be saved from the botheration and burden of information search so as to allow him more time to concentrate on the important task of managing and decision making. Today information is produced in vast quantities and by a variety of agencies. Cooperatives too have grown multifold leaving little or no time for the busy executives to dig out their information. Information is required to be handled, managed and monitored by specially trained library/ information professionals. Even in sophisticated fields such as scientific research and development which are totally information-oriented the situation has not been different. Organized information services were developed only when the accumulated data and information generation assumed enormous proportions and became unmanageable. This resulted in chaos and confusion and the workers were unable to keep abreast of situation of the developments in their field of work.

It is estimated that the world's output of new books is around 1,000 titles per day or about six million pages a year. The number of periodical publications brought out are estimated to be about 50,000 or about three million articles. These figures do not include reports, theses, proceedings, unpublished documents, etc., which also constitute a sizeable quantity. The latter category includes mostly nascent information which must be made use of before it becomes obsolete. In this sense information must be deemed as a perishable commodity, which fact contributes to the urgency of its handling.

If volume of literature is one obstacle confronting the prospective information users, access to it is still another. It is here that information services come to the help of information seekers.

Recorded knowledge is a vast inexhaustive resource having immense potential for utilization. It has been now recognised that information has value in terms of money. An information facility planned and run efficiently can be a source of profit because it can help executives, decision makers, managers, technocrats, engineers etc. to improve their competitive position.

2.3 Information Generation and Cooperative Literature

The main types of organisations which generate information in the field of cooperative can be broadly classified under the following heads :

(i) Cooperatives;
(ii) Cooperative educational research and training institutions and colleges etc;
(iii) Government departments, institutes, Inter-Governmental organisations, Ministeries, registrars of cooperative societies, commissions, special committees, etc;
(iv) universities and university institutes;
(v) Other research and educational institutes;
(vi) International cooperative organisations;
(vii) National cooperative unions, state cooperative unions;
(viii) Individual authors, and researchers; professional cooperators,
(ix) Conferences, congresses, seminars, symposia workshops, etc.

The literature of cooperation is, perforce scattered. It appears mostly in the form of books, booklets, articles, surveys, reports, proceedings, charts, dissertations, theses, unpublished reports and the like. Comprehensive and organised abstracting and indexing services are lacking. A few organisations like ILO, ICA, Plunkett Foundation, FAO, ICTC, CCT, VMNICM do make efforts for bibliographic listing of cooprative literature. However, because of inadequate coverage a good amount of cooperative literature is bound to go unnoticed, and hence unused.

The importance of the subject of cooperation can be guauged by the fact that a considerable amount of news space in the daily newspapers is devoted to activities and developments in this field. This dynamic factor renders the subject of cooperation to what can be termed as 'Action discipline' or 'Action subject'.

It is also necessary to take into account the volume of literature produced in the subject with which the subject of cooperation has close inter-disciplinary affinity and to which the subject of cooperation is applicable. A few of the more important among the former are management, economics, statistics, law sociology, education and training, commerce and agriculture. In the latter category cooperation is seen to have wide ranging ramifications into technology; the specific areas of activity include marketing, processing, storage, agricultural credit, economics and supply of inputs, housing, tribal cooperatives, industrial cooperatives, multi-purpose cooperatives, manufacture and supply of chemical fertilisers, pesticides, sugar, etc.

In a survey conducted by the ICA in 1973 it was found that a total number of 236 cooperative organisations all over the world were engaged in generating information out of which 117 organisations produced information in English language and 119 in languages other than English. The organisations producing literature in English language were also generating sizeable amount of cooperative information in their respective national languages. Like-wise, the

organisations producing cooperative literature mainly in languages other than English were also contributed considerably in English language also.

ILO made an attempt to list the World Cooperative literature during 1965-75. Although it does not claim full coverage the findings of this study give some insight into the literature output in the subject. On the average, it was reported that a total number of about 200 books were published per year, out of which 90 were in English language. India produced about 12 books per year. A good amount of literature was brought out in regional language. Plunkett Foundation (UK) reported that a total of 594 titles only were published during the period 1971-74, out of which 75% was in English. The ICA research Register of Studies on cooperatives in developing countries (1975) listed about 1,790 documents as published during the period 1968-72, which consisted of reference works, conferences/seminar reports, books, booklets and articles.

As far as periodicals are concerned ICA reported (1969) a total number of 456 journal out of which 179 were in English and 286 were in other national languages. India had been publishing about 31 Journals in English language and this accounted for nearly 75% of the Journals published in Asia in English. A total number of about 6,000 articles were included in the 179 English language journals, out of which about 4,300 dealt with the Asian cooperative movement. Of this number, about 3,000 articles were on the Indian Cooperative movement.

As a result of the increased and multi-pronged activity seen in the field of cooperation, we may assume a three fold increase in the production of cooperative literature.

2.4 Information Transfer is Process in the Cooperative Sector

Excutives and professional cooperators tend to keep contact with developments and advancements in their field through personal contact, correspondence and participation in symposia, seminars, and congresses. Information from colleagues seem to be supplemented by contacts in other cooperatives through visits, meetings and letters. Heads of cooperative organisations tend to have contacts with their counterparts and others in other parts of the world through attendance at international conference for exchange of new information. Personal contacts at meetings, conferences, etc. and exchange of information through correspondence are particularly vulnerable in the field of cooperation where the rate of publication of information is rather low and, where organised information and bibliographical services are inadequate or non-existent. Cooperative workers also seem to depend for their latest information on project annual reports, progress reports, etc., which are brought out either regularly or on ad-hoc basis.

It is estimated that about 40 percent of information is obtained form reports

of various kinds, about 30 percent from verbal and person to person exchange, 20 percent from memos, 5 percent from the conferences and another 5% from mass media.

3 INFORMATION REQUIREMENTS OF THE COOPERATIVES

Information is an important and crucial ingredient at each and every level of cooperative activiy.

The information requirement of cooperative organisations are of varied nature—economic, legal, personnel management, public relations, technological, statistical, industrial and the type mostly concerned with decision-making and management functions like—planning, organising, directing, coordinating, reporting, budgeting, etc. Decision-making is a complex process and the right kind of decision depends upon the right kind and quality of information and data available to the decision makers. Other types of information generally required pertain to :

(i) national and cooperative programmes and development plans;
(ii) cooperative movement history, structure and position;
(iii) bibliographies;
(iv) case studies;
(v) model documents;
(vi) training programmes and;
(vii) means of cooperative training and education.

The examples indicate the broad range of information which modern cooperatives need and must be able to retrieve, communicate and organize for decision making.

In the field of education training and research, a concerted effort is being made in India in a three-tier programme. The Vaikunth Mehta National Institute of Cooprative Management imparts training for senior level personnel and is also engaged in conduct of research. A net-work of sixteen cooperative colleges caters to the training needs of intermediate personnel at the second level. At the junior level, seventy five cooperative training centres take care of training of junior level personnel.

Let us now examine the information requirements of the cooperatives in relation to their functions of decision making, management, training and education because these constitute the core areas of the movement itself.

3.1 Information for Cooperative Management

The early cooperatives were started as a group activity by interested persons

for mutual benefit and were managed using conventional methods of management. The present range of cooperative movement is vast and diverse. The need for professional management techniques are increasingly and continuously being felt and stressed for effective control and administration of the cooperatives. Professional management is essential because cooperatives have to face stiff competition from the private trade on one hand and public sector on the other in a mixed economy like in India. Professional management pre-supposes a well organised management information system which provides an organised means for providing past, present and projection information relating to internal operations and external intelligence. It supports the planning, control and operational functions of an organisation by providing uniform information in the proper time-frame to assist the decision making process. The information to be provided comprises of :

(i) information for strategic planning (Policy making) to top level management;
(ii) information for management control (scheduling) to middle level management;
(iii) information for operation control (operations) to lower level management.

For policy making and planning the information required is mostly exogenous i.e., information about the industry, competitors, social, economic and political factors of interest to the organisation.

Control information focusses on internally generated information such as financial, production, etc. A good information system can avoid or correct any oberrations in the planning process. The right type of information input to the right person at the right time can minimize the chances of making wrong decision, or mis interpretation of decisions.

3.2 Information for Cooperative Decision Making

The nature of managerial decision making in the present day cooperative cannot be determined by the way it was done in the past. The modern managers and executives are known to depend on hitherto less known sources for their information requirement for decision making.

The question is, however, not one of making faster decision—it involves making the right long term resource mobilization and allocation for the organization as a whole within current regulatory and other constraints.

Decision making can be enhanced by improved capability to communicate information quickly and correctly to cooperative constituents at all levels. This is made possible by using sophisticated information handling and documentation techniques.

Decision making involves management functions such as planning, organizing, directing, coordinating, reporting, budgeting, etc. and therefore, the information requirement for these fuctions perforce overlap. Decision making is a complex process and correct decision depend to a large extent on the information available to it at the time of making the decision. This presupposes that accurate and timely information must be made available in a convenient form that can be used directly. Information for cooperative decision making are available from a vide variety of sources—documentary, human and institutional. The information could be available from external or internal sources.

Since the decision taken ultimately affects the vital and important activity of the cooperative organisation at various levels, information service for this purpose must be handled by trained and experienced information scientists.

3.3 Information for Cooperative Education, Training, Research and Extension Work

Cooperative movement owes its success principally to its sustained educational efforts behind it. Cooperative training and education facilities are prerequisites to cooperative expansion. The general educational functions of cooperatives are :

(i) In membership meetings;
(ii) In legal matters;
(iii) In financial affairs;
(iv) In a marketing society;
(v) In societies for consumer goods and supplies;
(vi) In savings and credit societies;
(vii) General.

Cooperative education in India relates to education of members, Office bearers and managing committee members especially of primary cooperatives. It also covers training of secretaries/managers and other employees of the societies in a restricted manner. Leadership development courses of the office bearers and directors of secondary cooperative organisations and special types of primary cooperatives are also undertaken.

During the year 1979-80, the number of senior personnel trained was 943. 6,461 persons were trained at intermediate level in the regular and short term courses.

Library and information services are the very sinews of any educational effort. Therefore, the important and formidable task of cooperative education requires a well coordinated and integrated information service for planning, coordination, formulation and implementation of the courses, as well as for the

benefit of the students and trainees at different levels. These comprise of books and publications, reports, monographs, journals, serials, other education material and information and audiovisual material etc. Training of the trainers is another area of considerable importance. Since education in relation to cooperatives is of applied nature the latest educational and training techniques must be used to impart instructions for which an effective information service in indispensable.

4 COOPERATIVE LIBRARY, DOCUMENTATION AND INFORMATION SERVICES

At present the information, documentation and library services in the different types of cooperatives in India are woefully inadequate to meet the above information requirements, and in many organisations these are just vestiges or are altogether non-existant. The organizations which have recognized the need for such facilities are but few. This sorry state of affairs is perhaps owing to the apathy and lack of appreciation on the part of the authorities. They seem to be bound and dictated by the traditional delusion that librarians are custodians of books and nothing more. Today, the advances made in the field of library, documentation and information science have virtually revolutionised the concept of conventional library service. They have become highly service-oriented units catering to the information needs of the readers, using advanced techniques in information handling, storage and retrieval. They are in fact, veritable fountains of knowledge.

The few organisations which have a semblance of the services do not meet even the minimal requirements of standards as regards space, equipment, manpower and funds for purchase of required books, journals, and other information material. Efficient library and information service depends on the competence of the professional staff and the range of the library/information resources. The remuneration of professionally qualified and trained staff are so low that it cannot attract competent and qualified professional personnel. Barring a few cooperative organisations the library services in other countries also leave much to be desired. However, this situation must not form a basis for complacency. Adequate facilities must be set up and developed. Indian cooperative movement being one of the largest in the world, perhaps can give a lead in this direction. For a large and important area of activity such as cooperation, in the national developmental programmes, and its status as a subject in its own right, a well coordinated and integrated information service is a prerequisite.

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DEVELOPING A NATIONAL INFORMATION SYSTEM FOR AGRICULTURAL SCIENCES IN INDIA

RAMA TIRTH

1 AGRICULTURE INFORMATION AND ITS USERS

Agriculture is a complex subject. Traditionally, it comprises of agronomy, soil science, plant breeding, entomology, horticulture, plant pathology, agricultural economics, and agricultural engineering. But nowadays it has come to include the food sciences, food technology, nutrition science, fisheries, animal and veterinary sciences, rural sociology, ecological and environmental management, and agricultural waste utilization also. It is true that agriculture is an applied science but it has close interconnections with pure sciences. Agricultural problem solvings draws heavily upon botany, zoology, genetics, biochemistry, microbiology, physics, chemistry, statistics and other sciences. Thus we find that in its scope agriculture is vast and its boundary lines are not clearly marked; its ramifications run into almost all physical, and biological sciences, and even the social sciences.

The agricultural information has many aspects, many levels and has many peculiarities.

The main burden of agriculture as a discipline is problem solving. Agriculture is the science of growing food and feed. In the process, the farmer comes to face a host of problems. On the solution to these problems depends the success of his farming. He must get the solution to his problems. He does not need elaborate scientific answers.

The information, therefore, is needed on the farmer's field and must reach there, and the information must be in such a package that it can be utilised at once. This is the peculiarity about agricultural information.

Another aspect of agricultural research findings which is not only important but frequently vital is the time factor. The farmer faced with a problem can

not wait for any length of time; he must get the answer at once. A most practical bias is, therefore, attached to major portion of agricultural information.

Agriculture has a strong geographical and regional aspect which is reflected in agricultural research and agricultural information also. The nature of the soil, the climate, crop diseases, etc. vary with geographical regions. This factor is very important and makes it necessary that the information should be such that can be locally applied. In India a vast majority of farmers is still illiterate and tradition bound; they are widely scattered throughout the country, working on small holdings; their entire families are engaged in farming on that piece of land. However, since the sixties a change has been creeping over the landscape. In the wake of the green revolution, farmers are by and large taking to scientific agriculture. Good seed, better varieties, value of fertilizers and pesticides, improved cultural practices, facts regarding weather and its forecasting, etc. are matters now being increasingly included into the repertoir of the common farmer. It is certain that with widespread and easily accessible agricultural information Indian Agriculture will quickly become as moder as any.

Agricultural information is used by a variety of people at various levels. The primary information that is produced as a result of research is used by the agricultural scientist working in the laboratory. This group also needs to be abreast of developments in those branches of sciences which affect his work.

The extension workers chief occupation is to interpret the scientific facts in a language which the farmer can understand; he, therefore, is mostly interested in a repackaged information which he can easily transmit to the farmer. Great scientific details are not important to the extension worker; he needs practical solutions to farmers' problems.

A large number of planners, and managers, in the government departments and outside also need to use agricultural information of many types. The ministries of finance, of agriculture, of irrigation and power, and the Planning Commission, etc. are the main consumers of agricultural information.

2 PRODUCTION OF AGRICULTURAL INFORMATION

Agricultural literature, in conformity with its users, appears at various levels. The results of the research, the primary information, is published in journals, research reports, books, patents, theses, and conference proceedings. Their number is not only unimaginably large but is growing at a fast pace, doubling in about ten years. It has been estimated that there are about 12,000 serials of interest to the agricultural scientist and worker; about 1,50,000 articles are produced every year which may be used by the agricultural scientist. This primary literature is produced in a large number of universities with agricultural colleges, agricultural universities, experiment stations, research institutes,

professional societies and laboratories all over the world. India is quite well off as regards agricultural research and her agricultural scientists can hold their own anywhere. There are twentytwo agricultural universities, about 75 agricultural colleges, and 24 veterinary colleges in the country, many of which are doing active research and publish results of research. They are either fully government supported (like the agricultural universities) or aided institutions. The governments concern with agricultural research is great. The Indian Council of Agricultural Research (ICAR) is the main government body responsible for agricultural research and education. The ICAR directly controls and manages 36 institutes and national research centres, 67 coordinated projects, and a number of ad hoc projects.

A vast amount of data is produced which has to be stored, analysed, and made available on time. The data includes; meteriological information about climate, rain, available moisture, etc. agronomic experimental data including fertiliser trials, evapotimuspiration, different areas under different crops, yields, soil fertility, input-output data, land holdings, incomes, animal husbandry, census, fisheries, forestry, agricultural machinery and implements, storage facilities, marketing, government policies on subsidy and procurement etc.

A large number of secondary sources of agricultural information are available in the world. A number of abstracting and indexing services are issued and bibliographies published. The Commonwealth Agricultural Bureaux (CAB) abstracting and indexing services, the bibliography of agriculture (US National Agricultural Library) are famous examples. There are many computerised data bases available e.g. International Agricultural Information System (AGRIS), AGRICOLA (US National Agricultural Library), Medical Literature Analysis and Retrieval Systems (MEDLARS), etc. Innumerable directories, yearbooks, data books, reference, sources taxonomic literature, floras, annual reviews, etc. are published.

Quite a large number of serials, monographs, pamphlets, etc. are published and provided by these agencies for the use of the extension worker and the farmer. Radio and television programmes in the assistance of the farmers are regularly broadcast. Governments—both the Central and the State have strong extension departments engaged in providing agricultural information to the farmer. The government is also actively supporting and encouraging other institutions and societies in spreading agricultural information far and wide.

3 PRESENT AGRICULTURAL INFORMATION SYSTEM IN INDIA

The agricultural universities, the ICAR institutes, the government departments have their own libraries and documentation centres. But these libraries have been designed, naturally enough, to serve the scientists and workers of the institution to which they belong. There is quite a large amount of

co-operative activity by way of inter-library loans and supplying of photo-copies among these libraries. Some of these libraries have developed good collections and services, but many of them have left many things to be desired. Many of these libraries issue information services like accessions lists, arrivals of journals, current contents, special bibliographies, etc.

The Indian National Scientific Documentation Centre (INSDOC) has established a National Science Library. The INSDOC includes agriculture also in their monthly Indian Science Abstracts, but they select only research articles. Their coverage is also not comprehensive. The National Science Library is supposed to have agricultural subjects also.

The Indian Council of Agricultural Research has established an Agricultural Research Information Centre (ARIC) which is located at the Indian Agricultural Statistics Research Institute (New Delhi). The ARIC can use the institute's computer facility also. The ARIC has developed a research file listing about 7,000 research projects, involving about 9,000 research workers, at different institutes and agricultural universities. It has the biodata of about 5,500 agricultural scientists. The ARIC is the Indian coordinating centre for the International Agricultural Information System (AGRIS) of the FAO and sends about 380 items every month for inclusion in their AGRINDEX, covering about 200 Indian agricultural journals, annual reports, technical bulletins, books and conference proceedings. The ARIC in return receives agrindex magnetic tape free of cost.

It is obvious that India does not yet have anything to call an agricultural information system. All efforts until now have been sporadic spasmodic, and isolated. Agricultural information is too precious to be left to the vagaries of occasional requirements. Agriculture is the life of the country. Therefore, for a lasting and perpetual effect a concerted effort is required. A system should be developed which not only ensures steady and continuous flow of information from lab to land but also encourages and utilises feedback. Obviously, a national grid of information system is the answer. A suggestion is made here for a possible organisation of agricultural information system for India.

In broad terms there should be a strong National Agricultural Library at the top. In each state the agricultural universities and the ICAR institute libraries will be the local centres for agricultural information from where extension workers will spread radially to cover its area of jurisdiction.

4 THE NATIONAL AGRICULTURAL LIBRARY

The concern of the government regarding agricultural information is very great and is understandable. Agriculture is the main life style of eighty percent of the Indian people and is the most important sector. The ICAR is the main government organ responsible for looking after agricultural research and information.

A National Agricultural Library is an essential necessity in view of the very complex nature of scientific and technical information production and dissemination. A National Agricultural Library is supposed to organise, coordinate, and direct a national agricultural information system. Among other activities the following should be its special functions :

1 It should be a national repository of all national agricultural literature produced in India in any institute, university, organisation, society or association. A copy of all theses will also be preserved here. It may be pointed out that Indian scientific literature in general and agricultural literature in particular is very difficult to acquire. This library should be authorized, under copyright law, to receive two copies of every agricultural publication produced in India.
2 It should acquire, process and maintain all relevant world literature, in all languages, books, journals, theses, reports, conference proceedings, etc. concerning agriculture, affecting agriculture, and of use to agricultural scientists.
3 The NAL should maintain a record of nation's holdings in the field of agricultural information. Through union catalogues, union lists and other tools it will have an uptodate information on what is available in which library in India.
4 It will serve the nation's readership through normal and special library and information services, like circulation, reference, referral, photocopy, documentation, etc. It will also help individual libraries in their SDI services and other needs.
5 It will be the main source of information to the government and its departments and be their adviser in decision making, planning, and management activities.
6 It will cooperate with other national information systems like the NML, NISSAT, ICSSR, etc.
7 It will cooperate with international systems like the AGRIS, INIS, CAB, MEDLARS, AGRICOLA, and other computerised data banks and systems.
8 It will have a translation facility. Agricultural literature is produced in European languages, Japanese and other south-east Asian languages. NAL will have facilities of translating them into Indian languages. It will also translate Indian language into one another.
9 The National Agricultural Library must have a strong R & D department. It should carry out periodic surveys of agricultural information systems in the countries, identify lacunae & weaknesses, improve upon existing arrangement and plan for future requirement.

10 The National Agricultural Library will arrange for training of personnel required for the agricultural information system.

It is obvious that establishment of such a National Agricultnral Library will need sufficient funds and other national and international facilities. Therefore, the central government, through the ICAR, should take the responsibility of the agricultural information system. Only with government help, patronage and encouragement can agricultural information system be established and put into the nation's service; there is no alternative if the Indian agriculture is to progress on scientific lines instead of haphazardly as of now. The ARIC already established by the ICAR can be the starting point to develop a national library. The Indian Agricultural Research Institute (IARI) Library could not be suitable to develop into a national library because it is only an institute library and it caters to only agriculture i.e. it does not cover animal sciences, fisheries, etc.

5 AGRICULTURAL LIBRARIES AND INFORMATION CENTRES AT STATE LEVEL

Each state in our country has one (some states have more than one) agricultural university. There are many ICAR institutes all over the country, but these are highly specialized and mostly one-subject institutes. These universities are supported by state governments and the ICAR, and are responsible, besides teaching and research, for extension service also. The libraries of these universities can, therefore, legitimately take up the rsponsibilities of an information resource center for the entire state. The ICAR institute library wherever it is present should take up information responsibility in the subject of their specialisation. In case there are more than one agricultural university in a state, the most developed university library can take up the responsibility, or the areas of the state could be suitably divided among these libraries. The function of these libraries will, therefore, be two-fold: one, their responsibilities towards their immediate clientele, and two, feeding other libraries and individuals in the state.

The extension workers, the village level workers, and other government agencies engaged in the dissemination of agricultural information of one sort or another, will depend on these university libraries and information centres for the exchange of information and ideas. Radio and television programmes, newspaper features, etc. prepared for the benefit of the agriculturists will also be supported for information by these university libraries. These university libraries will have very close cooperation with the ICAR institute libraries and the district libraries for a wider coverage of the state's population. The large number of agricultural colleges will be helped in their information needs and work by these agricultural university libraries.

These agricultural university libraries will function as a component of the

National Agricultural Library. For the state in which they are situated they will take on the role of the national agricultural library, such as, being the repository of agricultural publications of the state, centre of information on holdings of all state libraries, etc.

6 CONCLUSION

For India a two tier agricultural information netwook is essential : the National Agricultural Library at the top and, ICAR institutes and agricultural university libraries at the public level. With the cooperation of government established public libraries and district libraries this agricultural information network is expected to reach the largest number of the population. This network is essential if agriculture is to become a scientific activity and agricultural information is to be made available to all sections of the users, from the remote farmer to the agricultural scientist to the planner.

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MANPOWER DEVELOPMENT FOR INFORMATION HANDLING IN INDIA : SOME SUGGESTIONS

SHALINI REWADIKAR

1 INTRODUCTION

Information is a resource which is as fundamental as energy or matter, which affects all human activity and acts as an irreplaceable link between intellectual and material activities, is a widely accepted fact. Therefore information transfer serves a wide range of activities and needs efficient and effective functioning on the part of L & IS personnel for its proper utilisation.

It is the responsibility of L & IS education system to continuously develop and update the knowledge, attitude and skills needed to handle information. Efficient handling helps and contributes to the productive programmes in national development. There are rapid changes and improvements for larger storage capacity, better processing and retrieval of information through sophisticated mechanised means of information retrieval and co-operation at national and international levels is increasing. It needs reciprocal changes in the development of information handling competence among professionals.

It is the knowledge, skill, initiative and character of the personnel who handle the task of information transfer which determines, to a very large extent the rate at which information resources of a nation will be utilised, for development. Thus the quality of the workforce will determine the quality of services which the users of L & IS centres will enjoy in any organisation. Therefore continuing education for developing information handling competencies becomes a necessity to accept the challenge of dynamic progress in the information environment. Education is the key to improve the resource value of the personnel dealing with it. It can be formal, informal, on-the-job or off-the-job.

Information handling is a term increasingly used for what was traditionally known as information retrieval. Although it is a near synonym, it includes part

of the processing of information once it is gathered e.g. creation of personal files or users' profile. Thus the plan for manpower of human resource development should aim at increasing the competence for the present and potential workforce through education and training programmes. As majority may serve nearly two to three decades the initial education does not suffice in the rapid progress taking place in the field. Majority of the workforce can be trained, retrained for the technological changes and will be absorbed if proper teaching and learning methods are used in the continuing educational programmes. Not only the present job dimensions but the future requirements should be taken into consideration in the educational plans. Human resource development, therefore, has an emphasis on future requirements and has technological implications.

2 AIMS OF HUMAN RESOURCE DEVELOPMENT PLAN

Thus the human resource development plan should broadly aim : (i) to develop professionals for assuming role and responsibllity of providing effective transfer of information to users; (ii) to develop scientific outlook and awareness of their responsibility in the dynamic developments taking place in the Information Science field and technology; (iii) to develop sensitivity to overall background and developments of Information Users in the concerned organisation; and (iv) to impart knowledge, skills and attitudes to L & IS personnel which would contribute to productive and development programmes through effective information handling techniques.

3 EXPECTATION FROM THE PROFESSION

The professionals handling information can no longer remain as a traditional, static, linear contact between the readers and the documents. They must be dynamic and capable of entering and moving in the communication channels of the networks, at any point in any direction. They are expected to be sniffers of information and pinpoint, who said what? through which channel? to what effect. They are expected to assume a role of feeding forward, in the creative process and point out where lacunae exist in the knowledge and creative processes. A free flow of information should be ensured to users. They have to be catalyst but at the same time a symbiotic function of transfering information from research to its application in the creative process is also expected. Effective transfer of information in all activities of life of the people ensures the development of the nation. Thus the expectation from the professional is to be a media expert as well as counsellor. It requires emphasis and involvement with users' environmental context. As the expectations are very high from the profession it requires a special and expeditious educational, training and retraining programmes on a much larger scale than the NISSAT plan and National Cen-

tres like INSDOC, DRTC and present university educational centres are able to provide.

There is partial transfer of information from Indian scientific research to advanced nations and virtually no transfer from other areas of knowledge. Within India itself there is only a partial, transfer of information is done from scientific research to industries and very meager exchange is done to areas of social concern. As such increasing the potential of information—personenl, in whatever organisation they are placed; becomes a vital necessity for the overall development of the nation.

4 INFORMATION INFRASTRUCTURE AND ENVIRONMENT IN INDIA

India has embarked on a programme of providing information in the area of science and technology under the NISSAT Plan i.e. National Information System in Science and Technology. Scientific information if provided suitably to various users is expected to improve the socio-economic system of the nation. Social Science information is also organised through national and regional organisations by acquiring, organising and disseminating it.

The proposed information policy of the government also covers, besides other related aspects, the manpower development scheme, for the information system and cooperation with other national and international organisations. Sectoral information centres are established and training cources were held at Bangalore, Madras, New-Delhi, Bombay and Calcutta.

Pilot project using computer based, SDI services at IIT, Madras was sponsorad by UNISIST, using Chemical Abstracts condenstates and INSPEC data bases. It provides information to 400 users in India, Nepal and Sri Lanka. Online demonstration at BARC Bombay linked, scientific users in India to world sources of information through UNISIST assistance and collaboration with ESRIN data base at Frascati Rome. It is planned to provide permanent terminals at Bombay, Delhi for the above data base.

International tele-link-conference was organised by Department of Science and Technology as an experiment on 10th March, 1980. Information scientist from seven countries participated in it.

Electronics commission intends to provide interactive-data-bases for Agriculture, Industry, Energy and Manpower, etc. It intends to develop and provide hard-ware and soft-ware know-how at national centres. Regional Computer Centres at Calcutta, Kanpur, Chandigarh and Pune intend to gear up information facilities in decision making process, to government departments and help in development of the nation through planning process. It intends to disseminate information through 450 computers.

Effective use of computers in industries, airlines reservations, universities

etc. has already started. Computers with display terminals are also being manufactured in India.

SITE and INSAT satellite communication programmes and transmissions, monitor agriculture and educational information besides sports, entertainment etc. through television network in the nation.

Telex and Microwave telephone network exists to help speedy communication beside Post and Telegraphs, radio, telephone throgh cables, television, newspapers, cinema, printed literature and satelite communication.

These developments and landmarks cited above indicate that India is poised utilising world information systems and networks. It has plans for a well integrated information network. If property implemented and utilised, it will raise the physical quality of life in India by improving the socio-economic system through effective information transfer.

Considering the infra-structure and environment of information in the national the personnel responsible to handle it, should be well prepared, to utilise the technological development taking place in the nation.

5 FUTURE POSSIBILITIES

1 It can be predicted through these trends that computer hardware and software costs will decline in India. Mini computers and terminals will steadily increase as on international scene.

2 Storage capacity of computers will increase considerably at lesser costs.

3 Data base systems will be available in future in India.

4 Net-works through telecommunication and use of computers will increase, on-line-acess to remote data bases at regional, national and International levels in India.

5 The information retrieval trends indicate integration of primary and secondary publishing as integrated information system, which will have reciprocal changes in India.

6 There will be increased national and international co-operation, in bibliographic control and dissemination of information.

Taking into consideration the present realities and future possibilities in the information environment of the nation, some of the knowledge proficiencies, attitudinal changes, abilities and skills that are needed in handling of information are suggested below.

5.1 Attitude Changes

Manpower development should aim at major attitude changes from Library custodian model to information science approach and mode of handling information.

5.2 Abilities to be Developed

Mental alertness and intellectual capacity to grasp the multi-disciplinary contents of information science approach. Increased ability to deal with people i.e. social skills and development of occupational aptitude.

6 KNOWLEDGE AREAS FOR DEVELOPMENT

1 Basic professional training with emphasis and appreciation of multi-disciplinary nature of information science. Competence in the subject (s), discipline (s) of L & IS centres.

2 Knowledge of information and literature, sources, their limitations in the respective fields.

Primary, secondary, tertiary sourees. Conventional and non-conventional sources, including Knowledgeable person (s) and Invisible College.

3 Knowledge of bibliographic data bases, information systems and vendors in the concerned areas at regional, national and international levels.

4 Detailed knowledge of various formats of information. Print media, near print media, graphic media, microforms, machine readable media and composite media.

5 Information retrieval methods : conventional and non conventional i.e. manual as well as mechanical.

6 Knowledge of classification, indexing procedures followed in areas of concern at national and international information systems, data bases and L & IS centres.

7 Knowledge of computer functioning, programming-language, search methods, input-output devices. Knowledge of interactive terminals, querry language or codes used at data bases.

(8) Knowledge and analytical capacity to evaluate concerned literature, information and data.

Literature-search, reporting reviewing methods, effective presentation, i e writing, editing publishing and translation, etc.

(9) Interview methods, statistical method, research methods, particularly for users' survey and profiles.

(10) Knowledge of various publications and duplication procedures.

(11) Knowledge of human relations : users' psychology, motivating capacity. Promotional and sales promotion methods for information use.

(12) Knowlege of teaching methods especially for users' education, which will further need :

(i) Knowledge and ability to handle teaching/learning aids.

(ii) Knowledge and methods of motivating groups of users for information use.

(iii) Knowledge of maintaining group attentiveness and interest.
(iv) Knowledge of planning course. Deciding duration, time, medium course contents, approach of teaching, i e theoretical or/and practical according to groups' subject background or information needs, level of education, literacy or capacity to grasp. Other local considerations. Evaluation and feed-back methods for course improvement.

These sub-areas will also be needed in decision to conduct development courses for practitioners as well as for university students of L & IS education.

Knowledge of non professional routines like filing; typing, key punching etc will be helpful.

Skills and competencies in handling the above cited knowledge requirements will also need organisational, co-ordination, and managerial capacities of various information-operations; personnel, equipment so as to function as an efficient system.

In conclusion one can say that the staff will have to develop, broad interest and be capable of developing competencies in number of functions and areas. It is rather an exacting job of a multidimensional specialist as well as generalist who is capable of communicating with computer programmers, and expert, system analysts and subject specialists etc.

They will need depth knowledge of subject/discipline of L & IS centre, information retrieval methods and technology simultaneously competence in teaching and research methods will also be needed. Above all they must possess interpersonal skills.

7 SUGGESTIONS

The courses should take into consideration the international and national standards of education and training programmes. At the same time local considerations and constraints cannot be overlooked. Courses should depend upon, on-the-job needs, mostly, for practitioners.

1 Thus survey of educational needs of homogenous groups of information handling personnel, should be undertaken; with possibilities of developments in the concerned area, subject/discipline of L & IS centres and users.

2 Latest educational techniques and technology should be adopted for effective results in development courses. Emphasis on adult-learning-process is needed for practitioners.

The continuing education programmes should be chalked out with details of timing, duration, course contents, medium, mode of teaching, evaluation and feedback methods. Decisions should be carefully made as to which mode of course will suit the practioners and students, e g. Full-time, short time, sandwitch courses, mobile courses, on-the-job or off-the job.

3 Besides imparting theoretical knowledge, emphasis should be given in practical handling of information. Facilities should be available for demonstration.

4 Developments in the subject or discipline of concern should be made a compulsory module of the course work.

5 Major employing organisations, institutions; government ministries, major public and private industries, major types of L & IS centres should be the target at initial stages for speedy results in developing personnel in information handling.

6 Since overall socio-economic development of the nation depends on rural population; their activities, and welfare will need the major information transfer. Information handling needs will rest on rural development problems and plans. Social considerations are needed to equip personnel for effective handling and transfer of information in the area of vital concern.

7 Plans to motivate the decision making units into funding the courses should be made. Leave with full-pay to personnel should be granted. Statutory obligations should be explored and enforced on employing organisations for compulsory continuous development of its personnel. Major organisations with sizable number of personnel should employ permanent training staff within the organisation.

8 Since majority of library schools do not have facilities to incorporate latest developments in the field, initially the leading institutions of the nation should undertake the development courses. It should include practitioners and L & IS educationists. Once the teachers update their knowledge, it will expedite the regional developments at various levels and groups of L & IS personnel.

9 As the field is vast and multidisciplinary; it needs co-operation from various subject experts. Therefore L & IS deptts at leading universities, national centres for documentation and I I T's are particularly best suited to undertake the development courses till all the regional L & IS education centres are well developed.

10 Since most of the full-time courses in various universities are not updated there is urgent need to incorporate latest developments in the field.

8 PROPOSITIONS FOR DISCUSSION

1 Identify areas of knowledge proficiency, to be developed, attitude changes to be required, abilities and skills to be increased, in the development courses and programmes.

2 Identify institutions which can conduct the courses of various duration to cover all L & IS personnel.

3 Chalk out and plan the courses.

4 Identify additions to course-contents for full time univesity degrees and of other centres.

5 Plan out teaching/learning methods to be used.

6 Plan a strategy to motivate employers to facilitate, practitioners' continuous dovelopment.

7 Plan a strategy especially for effective transfer of information in rural areas and required deveopment of L & IS personnel.

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MANPOWER DEVELOPMENT FOR LIBRARY AND INFORMATION SCIENCE IN INDIA : TRENDS AND ISSUES

P B MANGLA

1 BACKGROUND

In librarianship, the past history of India, like that of several other countries in the East, is that of a country having libraries with little emphasis on 'library service' in the modern sense. The recognition of the vital role of libraries in the educational, scientific and socio-economic development of the country is a rather recent phenomenon which came into existance, say, during the past 2-3 decades.

The need for professionally qualified personnel to manage and run these libraries effectively and efficiently was, however, duly recognized during the first half of the present century and consequently, library education programmes had been started at several places much before independence in 1947. For example, the first one year postgraduate diploma course in library science, which in several ways served as a model for developing Library Science Training Programmes in the country during the pre-and post-independence period, was established, at the initiative of S R Ranganathan, at Madras University as early as 1937. The total number of universities conducting the diploma course at the time of independence was five.

After independence the stimulus for the growth and development of libraries, documentation centres, information centres and of library science education came from the progress in and extension of education, scientific research and programmes of socio-economic development in the country. These programmes of national development and reconstruction, started in 1951 with the commencement of the First Five Year Plan have already progressed through three decades. As a result of these developments library and information science

(L & IS) today is a well recognized discipline of study and research at the post-graduate level in about 45 universities in the country.

All these 45 universities conduct a one-year post-graduate course leading to the award of Bachelor's degree in Library Science (B Lib Sc) or B L I Sc. About 19 of them have a further one-year course for the Master's degree in the subject called M Lib Sc or M L I Sc. Nine universities enrol students for PhD degree and one university viz. University of Delhi has been conducting a one-year post-Master's degree course since 1978 leading to the award of M Phil degree in the subject.

In addition to universities, the Documentation Research and Training Centre (DRTC), Bangalore, and Indian National Scientific Documentation Centre (INSDOC), New Delhi also offer training courses in documentation and/or information science leading to the Associateship of the respective centres.

2 ROLE OF LIBRARY SCHOOLS

In order to meet the manpower requirements library schools in the country are expected to play a dual role in their training programmes, viz :

(i) to provide training of a type and at a level so as to meet the existing requirements of the library and information infrastructure; and
(ii) to provide necessary orientation and specialization which can be useful to develop the infrastructure on modern lines during the foreseeable future, say 5-8 years. This aspect gains all the more significance because of facters such as (i) prodigious and continuous growth in knowledge and information, (ii) changing needs of the users, (iii) continuous developments in information technology, and (iv) new developments in information services in developed countries and at the global level, from time to time.

In other words library schools carry an important responsibility to prepare professional manpower for the present and future needs in the country. They therefore should not direct their energies exclusively to traditional, current library practices and needs, they must in addition play a role of innovator by proposing new developments, investigating the old, re-examining the accepted, experimenting with untried and in sum serve as leaders in the field.

Saunders while discussiong the role of library schools echoes the same idea when he says :

> Implicit in all this is the acceptance by all those responsible for professional education of a wider responsibility than merely producing practitioners for the situation as it is at present : a professional school must also identify future

professional trends and needs and prepare practitioners to meet them. In other words it should lead rather than be a pale reflection of it.
Periam Danton emphasised upon the same and said :

> Unless library schools in some measure assume a role of leadership, we can hardly expect more than maintenance of the status-quo and a static condition of librarianship; if progress and improvement are to be achieved they will come to a considerable degree from leadership exercised by the schools which must then be at least a step ahead of libraries for which they prepare the staff members.

3 MAJOR AREAS OF DISCUSSION

The vast expansion of L & IS education in the country after independence has naturally raised numerous problems which have been reviewed, criticized and discussed in committee reports, conferences, seminars and workshops over the past two decades or so. Some of the vital areas of concern are : (i) levels of education, (ii) student characteristics, (iii) course contents, (iv) faculty composition, (v) need for accreditation, (vi) continuing education for teachers, (vii) use of suitable methods of teaching and aids, (viii) needs for developing research programmes, (ix) the status and administrative organization of library schools, (x) employment opportunities, and (xi) L & IS literature.

Although the Advisory Committee for Libraries appointed by the Government of India, in its Report (1958, 1960) made several important recommendations for developing the training programmes in the country, the Report of the University Grants Commission (UGC) Review Committee (1965) called *Library Science in Indian Universities* can rightly be considered as the first comprehensirce document on the subject.

Important seminars and workshops that have discussed this subject in greater details are : (i) Seminar on Education for Librarianship in India held at Chandigarh in 1962, under the auspices of the Indian Association for Special Libraries and Information Centres (IASLIC); (ii) three seminars/workshops held at the University of Delhi, Department of Library Science : (a) Seminar on the Teaching of Library Science (1966), (b) Workshop on the Methods of Teaching and Evaluation in Library Science (1973), and (c) Seminar on Library and Information Science Education in India (1977); (iii) two national conventions on Library Science Education held in 1976 under the auspices of the Indian Library Association (ILA) and, (iv) the seminar on Library and Information Manpower Development held at Bangalore in 1976 under the joint sponsorship of DRTC and INSDOC. The present author acted as Director of the 1973 and 1977 workshop and Seminar at the University of Delhi and of the two ILA Conventions of 1976. Several aspects of this subject also have been discussed at two

international seminars held at Bangalore : (i) the Meeting of the Supervisors of Library and Documentation Schools in the Asian Region (1976) under the sponsorship of Unesco, and (ii) the Indo-US Seminar on Scientific and Technical Information (1977) under the sponsorship of the Government of India, Department of Science and Technology.

In addition, the UGC has appointed a Panel of Library and Information Science to review periodically different aspects of the existing L & IS education programmes in the country and make recommendations for future developments. The Panel has already finalized its recommendations with regard to various aspects such as status of library schools, teaching faculty. financial support, physical facilities, syllabii for BLIS, MLIS and M Phil programme, etc. and these have been sent to the library schools in the country for implementation. Some of the major areas are as discussed below :

3.1 Levels of Training

3.1.1 *Bachelor's and Master's Programmes*

(i) As in the United States, Canada and even to some extent the United Kingdom, librarianship in India is largely a postgraduate profession. It is generally agreed that in order to have well qualified and competent library and information scientists at senior levels, the training programmes in L & IS should continue to be conducted at the postgraduate level.

(ii) As mentioned earlier, the emphasis continues to be on the first professional degree, viz. B Lib Sc/B L I Sc. On an average about 1,500 graduates qualify for this degree every year in the country. With regard to the Master's degree programme, of the 19 library schools, only a few are in a position to admit more than 5-8 students every year with the result that the annual output of all the 19 library schools is not more than 150.

(iii) Though the B Lib Sc/B L I Sc course is conducted at the postgraduate level, yet it is equated with the undergraduate courses in the universities because of its present denomination. It is generally felt that a more appropriate name needs to be given to this course to indicate that it is a postgraduate course and thus is different from the regular bachelor's degree courses at the under-graduate level.

(iv) One of the issues often discussed is : whether the training programmes in L & IS should continue to follow the present pattern or should the pattern be changed to a two-year Master's degree by discontinuing the intervening B Lib Sc/B L I Sc degree? In this context no clear picture has however emerged as yet.

In an effort to study the pros and cons of this question various points given below deserve careful consideration ;

A. In Favour of Two-year Master's Degree : (i) In libraries of different types, documentation centres, etc. excepting for the junior level positions' a Master's degree in L & IS with preferably even with a Master's degree in a subject is much desired;

(ii) Since after joining a job it is not easy to obtain study leave, deputation, etc. for further studies, one with a mere B Lib Sc/B L I Sc degree may find it quite difficult to improve one's qualifications by joining a Master's degree course at a later stage;

(iii) The duration of two academic years would provide teachers and students sufficient time to have a reasonably comprehensive coverage of the theory as well as the practice of the subject and would thus help in improving the quality of the end products; and

(iv) It would bring an enhanced status to the library school and its teachers in the university set up.

B. In Favour of Retaining the B Lib Sc B L I Sc Programme : (i) Generally it is found that although the minimum qualification for admission to the B Lib Sc/B L I Sc course is a basic bachelore's degree, yet because of a tough competition for admission, most of the library schools in the country admit only those who possess at least a good second class Master's degree in a subject. To acquire a Master's degree one requires 16-17 years of education, and an additional one year would mean that one has to spend 17-18 years on education before one is eligible for a professional position in a library or documentation centre.

In every batch of the B Lib Sc/B L I Sc students there are always quite a few students who, because of various reasons such as economic, domestic, or lack of interest, etc. are not quite willing to spend one more year for doing the Master's degree course in L & IS. It is also observed that quite a good percentage of women students who join the B Lib Sc/B L I Sc these days in larger numbers generally fall under this category :

(iii) Quite a few students, and generally those of the medicore type, are not that ambitious to make a quick rise in their professional career. They are quite satisfied to join junior positions and avail of the chances for promotion either on the basis of their seniority in service or by improving their qualifications at a later stage;

(iii) Several existing library schools in the country are not adequately equipped with teaching and other facilities to run the 2-year Master's degree course; and

(iv) Because of the resultant increase in the number of Master's degree holders who would thus qualify from the library schools, the problem of finding suitable employment would become quite difficult. This point gains further significance because like several other professions their still is no proper manpower plann-

ing in this field in this country.

Because the abolition of the Bachelor's degree programmes at present is not generally desired, it would centainly be valuable if some of the better library schools were to experiment with conducting the 2-year Master's degree course. Such an experiment which may be spread over a period, of say, 5-8 years, would given an ample opportunity to the teachers, librarians and other employers to make a comparative evaluation of the products of the two systems. Such an evaluative study would certainly be useful for reorganizing the present pattern of the L & IS education in the country. It would be essential, however, to ensure that students completing their training programmes under these two systems would not be at any employment disadvantage with respect of each other.

C. Another Alternative Pattern. As another alternative it may also be suggested that like other subjects, L & IS be offered as one of the subjects at the undergraduate degree level in colleges and universities, for the three-year bachelor's degree which may be called B A or B Lib Sc degree. Those who would secure such a degree may later on be given preference for admission to the 2-year master's course in L & IS. Otherwise with only the undergraduate degree they should be considered as quite suitable for junior professional positions. The argument usually given against this pattern is that since a library or information scientist at a senior level deals with information or knowledge contained in documents as such, it would be more appropriate for the entrants to the profession to have sound background and understanding of a subject(s). It is therefore advocated that a subject bachelor's degree with Honours, or even preferably a master's degree in a discipline, should be considered essential for admission to the library schools at the university level.

3.1.2 *M Phil/Ph D Programmes*

The overall pattern of education and research for M Phil and PhD degrees follows the pattern of other subjects in universities or institutes of higher learning. As mentioned earlier, the University of Delhi is still the only university conducting a one-year full-time M Phil programme after the Master's degree and already 6 students have qualified for the degree. A Ph D student generally has to work for a minimum of 2-3 years before he can submit his thesis.

3.2 Course Contents

One of the areas which in particular needs to be reviewed is with regard to the course contents. On the basis of their course contents the library schools in the country can be broadly classified into three categories : first, those which

continue to follow the traditional courses, and these schools are in majority; second, those which are more progressive looking in their approach so as to equip their students with knowledge of library science as well as information service and thus most suitable to meet the manpower needs in the country (e.g., Delhi, Mysore, Kerala, Madras and Osmania); and third, the library schools offering courses under the denomination of documentation or information science, such as DRTC and INSDOC.

Since the present age is rightly called an age of 'information explosion' the rich resources of information available in the world as a whole certainly need to be tapped and exploited for productive use merely becasue it is a well recognized fact that man's jndgement is no better than his information. There is, therefore, a much greater need today for specialist with expertise in selecting, producing, organizing and presenting information to the user at a time and place where he needs it and in a form which would best suit his purpose.

It would be quite relevant to emphasise here that today a fairly good idea about the vital role of computers and other electronic gadgets in libraries and documentation centres can be evinced by the success with which they have been used in many libraries and documentation centres in developed countries and in a few of them in developing countries including India, for various types of jobs and services such as circulation control, book ordering, SDI, CAS, etc. The computer with on-line terminals dispersed over an extensive geographic area for facilities such as centralized cataloguing, net-work planning, resource sharing, etc already promises more effective and efficient library service with substantial reduction in operation costs. These innovations have not only greatly changed the traditional training programmes in library schools the world over but have also made it possible for libraries and documentation centres to provide various types of bibliographic and reference services which are found to be really useful by the clientele.

In view of these developments and needs, a library school in this country must provide proper place for these new areas while designing its curricula.

3.2.1 *Conventional courses Vis-a-Vis Information Science Courses*

It needs to be mentioned here that the need for a proper coordination and balancing in the curricula between the so called 'conventional' courses and new areas of information science would largely depend upon the persent and future developments in library and information services in a country or region. In view of the fact that in this country majority of the libraries still would take much longer time to use electronic gadgets, the L & IS programmes have to be so designed as to equip the students with (i) knowledge and techniques to handle the immediate job requirements in an effective manner, and (ii) knowledge to develop programmes, procedures and services on modern lines wherein

the use of computers and other electronic gadgets could be made to achieve better results.

Whereas at present students with education only in information science as such would be needed in a few special libraries, documentation and information centres, it is strongly felt that to meet the larger manpower needs in a developing country such as India the majority of the students should have a proper lending of education in library science as well as information science. It is the considered view of this author that while the continued emphasis (or rather over emphasis) on 'conventional' techhiques in the training programmes would in the long run make our graduates misfits in the changing environment of library and information services, to make them specialists in the areas of 'information science' alone, also would be less helpful at the present stage. It is because of this need that a few library schools not only revised their curricula but have also redesignated their degrees as Bachelor's/Master's degrees in Library and Information Science. Such a blending between library science and information science has also been considered essential by the UGC Panel on Library and Information Science and the courses recommended by it for different levels as given in Appendix I reflect this need.

From my own experience in the University of Delhi Library School, it may be worth mentioning that during the course of our disucssions for revising the Master's programme a few years ago, questions such as 'what is information science'? and 'how much of information science' were often raised and considered. Although it was not easy to find satisfactory answers to these questions it was finally agreed that there was certainly a great need to introduce various new areas as 'computer application in libraries' 'systems analysis', 'information storage and retrieval', etc. in the curriculum. The nomenclature of the course was also changed for the first time in the country to Master's degree in L & IS in 1972. About 150 students have already qualified with the M L I Sc degree during the past ten years. We have still not conducted any formal survey to ascertain how much use these students have been able to make of this new knowledge in their actual work on jobs. During informal discussions with many of them, however, it has been found that this new knowledge has greatly changed their whole concept and outlook of library and information services. Some of tnem have had useful interaction with senior colleagues and employers to plan and organize their collections and services on modern lines wherein the use of computers could be made in the long run. In other words such background and knowledge do equip them with a feeling of self confidence and competence to discuss new trends with information specialists, computer scientists, etc. and thereby take steps to develop these services on new lines.

It would however be pertinent to point out here that introduction of these new areas must be properly planned because otherwise the non-availability of teachers for such courses may be a real hardship in developing countries like

India. Fortunately however computer facilities are being developed for various purposes in almost all the universities in the country.

3.2.2 *What is Information Science?*

One question generally asked and diseussed and often with least satisfactory answers, is 'what after all is information science'? Is it an extension of library science or is it an independent multi-disciplinary field wherein library science falls as one of the contributory disciplines'? According to Peter Harvard-Williams

> both library studies (or library science in the United States) and Information Science are swiftly developing subjects, and so the relation between them is in a constant state of change. There are those who would see library studies (and archive studies) as a part of information science and those who see library studies (and archive studies) and information science as overlapping disciplines.

Mikhailov however defined information science (which he, following Eastern European terminology calls Informatics) as a new scientific discipline "concerned with the patterns and general properties of science information as well as the laws governing all communication processes including those of science information activities". Harold Borko also sees in information science a true discipline "that investigates the properties and behaviour of information, and the means for processing information for optimal accessibility and usability. It is concerned with that body of knowledge relating to the orgination, collection, organization, storage and retrieval, interpretation, transmission, transformation and utilization of information. This includes the investigations of information representations in both natural and artificial systems, the use of codes for efficient message transmission, and the study of information processing devices and techniques such as computers and their programming systems".

Rees and Saracevic told an audience at 1967 Convention of Special Libraries Association that information science "cannot be equated with documentation, information retrieval, librarianship or anything else. Information Science is not souped up information retrieval or librarianship any more than physics in super-charged engineering. Shera's view in this respect is that librarianship is the generic term and information science is an area of research which draws its substanee, methods and techniques from a variety of disciplines to achieve an understanding of the properties, behaviour and flow of information. Information Science is not souped up librarianship or information retrieval, nor is it antithetical to either. Rather information science contributes to the theortical and intellectual base of the librarian operations'.

In view of the varying definitions and interpretations given by different authors, it is not easy to arrive at a specific definition of Information Science and its relationship with library science. In general terms, it may be understood as a discipline which is concerned with a study of the properties and behaviour of information as well as the factors influencing the flow of information. It also deals with the methods and techiniques of processing information for its easy accessibility and usability at reasonable cost. It may be considered as a multi-disciplinary subject with mathematics, logic linguistics, operations research, management studies and even library science, etc. as contributory disciplines. Its scope covers various aspects such as the origin, selection, organisation, storage and retrieval, interpretation, transmission, dissemination, utilization of information. Information processing devices and techniques such as computers and software developments are also considered.

In view of the emergence of information science as a discipline which lays great emphasis upon the processing and dissemination of information with the use of computers, it seems really essential to reiterate that library schools in the country must take steps to redesign their curricula, particularly at the Master's level, so as to educate their students about these new developments, in a proper manner.

3.2.3 *Information Science In US Library Schools*

In may be worth mentioning here that though most of the research and development in information processing and handling has taken place outside the library schools and represents non-library effort, the Library Schools in the US are responding to change and have revised or started revising their curricula accordingly. As early as 1967 survey conducted by Rees and Ricco of the courses being offered in this field by the ALA accredited library schools indicates that seventeen schools gave courses in data processing and library automation; ninteen in documentation and information storage, retrieval and dissemination and six in research and methodology. Thus they conclude that "The crucial issue at the present time is not whether library schools need to teach information science and engineering but rather how should it be taught and by whom. By this we mean whether as an inter-disciplinary venture in conjuction with other university departments or perhaps by a truly inter-disciplinary school of librarianship, which is an approach being already explored by several library schools. These findings of Rees and Ricco seem to be supported by those of Lester Ashiem's study of accredited library school curricula for the year 1966-67 and of 1969/70 by J. Belzer and others.

Saracevic and Rees summarised in 1968 that there were three types of programmes for the professional education of the information scientists in the U.S.: "(i) those which are library school based and are derived mainly from interest

in information retrieval, (ii) those which are engineering school based and which have strong ties with departments of electrical engineering, computer science and applied mathematics; and (iii) those which are dispersed among several subject departments of a university, such as philosophy, psychology or linguistics. According to them all these programmes emphasise the existence of basic tools and methodologies from other disciciplines such as mathematics and logic. All demand an insight into the phenomena, processes and systems involved in communication... Differences do, of cousse exist with respect to emphasis. A reasonably clear differentiation between information *science* and information *technology* can be found in the various educational programmes".

Discussing about information science education in U.S. library schools Paul Wasserman observes, "In many cases the programmes remain fundamentally unchanged. In other instances new courses are made available as elective offerings. This is the characteristic of the majority of the traditional programmes. Some education offerings, however, give concentration in information scienc requiring specialized preparation as a condition of admission at the Master's level. In other inslitutions the main thrust is at the doctoral level. In still other instances, the offerings are in new programmes committed to information science dedicated to generating a new breed of professional and researcher, quite apart from library education as it has been known. In a number of these instances, the concentration of educational concern remains predominantly upon research, with teaching seen only as the proper coorelate of such a research commitments."

While reviewing the position today we find that programmes in the U.S. Library schools cover a very wide range of electives' particularly because some schools allow a considerable measure of choice in individual programmes of study. Bearing this in mind, a distiction in orientation can be noticed between the programmes in the library-oriented schools and those in the information science oriented ones. Certain Information Science Schools have also been establised which offer a few carefully designed 'programme packages' of which those on 'Information Systems' are probably the most relevant for our purpose.

3.2.4 *In Certain Other Countries*

It is perhaps true that in countries such as Canada, UK, Germany, etc. as well coursss in information science/studies have been included in the curricula for the training of librarians and information scientists. In certain library schools such as at Sheffield in UK even separate courses such as MSc in Information Science/Studies have also been initiated. Separate courses in 'informatics' have been established in the USSR as well.

3.3 Teaching Faculty

Upto the late 1950 'the teaching faculty in library schools consisted of part time teachers usually drawn from their respective university libraries. The university librarian invariably functioned as head of the library school. The need for full time teachers was duly recognized by the University Grants Commission (UGC) Review Committee (1965) which said :

> "While we would welcome a close association between the departments of library science and the library in a manner to be determined by the universities, we are not in favour of the present practice of employing part time teachers in the departments of library science drawn from the university libraries. This in our view is not conducive to effeciency. . .Therefore, it is not proper to continue any longer the practice of engaging the univesity library staff to be part-time teachers in the departments of Library Science".

The trend over the past two decade or so has been gradually to emyloy full time teachers as well as full time heads of the library schools. This aspect has been further discnssed by the UGC Panel on Library and Informion Science which recommended that "A University Department of Library Science/Library and Information Science. . . should have adequate full time teaching staff and also full time Head".

The total number of full time teachers in library schools in the country is estimated at around 140, with 6 Professors, about 30 Readers and 104 Lecturers. These teachers are at par with their counterparts in other teaching departments with regard to their status, salaries, study leave, vacations and other facilities.

Qualifications and experience prescribed for the teaching positions are also generally at par with other teaching positions in the respective universities. A master's degree with a Ph.D. and teaching experience of 5-8 years is usually prescribed for teaching positions of Professors and Readers in Indian Universities. Librarianships being a newly emerging discipline for study and research, and there being a substantial demand for teachers, it has generally been difficult to recruit teachers with these qualifications and experience. The situation has improved somewhat during the past 5-7 years but a good deal remains to to be done still. Since the number of people with a PhD degree in L & IS in the country is not more than 10-12, as a transitory measure a PhD degree is not being insisted upon for recruiting Professors and Readers in these library schools. Those Indian teachers who have had higher education in American or British universities have greatly helped in strengthening the teaching programmes in several Indian library schools.

It seems that for quite sometime it would be quite difficult to recruit teachers who have background of both library science and of use of computers in

libraries. Till such time such teachers would be available, library schools would have to take assistance from people in computer science who could develop proper orientation to teach in library schools.

According to the UGC Panel on Library & Information Science : A library school conducting B Lib Sc/B L I Sc course should have a minimum of 1 Professor 1 Reader and 3 Lecturers; and the one conducting both Bachelor's and Master's degree courses should have 1 Professor 2 Readers and 5 Lecturers. Library schools enroling students for M.Phil. and Ph.D. programmes would calculate additional staff requirements by taking into account factors such as specialization of courses to be offered, interdisciplinary nature of research areas, etc. It has also been suggested by the UGC that the teacher student ratio may be 1 : 10 for the Bachelor's level courses and 1 : 5 for the Master's level.

3.4 Research Activity

Though a developing country, India's original contributions in L & IS particularly in the voluminous writings of S R Ranganathan are already well recognized all over the world. The first PhD degree in library science was awarded by the University of Delhi as early as 1957, but the development of research activity in library schools has been rather very slow.

Because of vast expansion in libraries and documentation centres in the country during the past two decades or so, job opportunities greatly improved and persons with good academic and professional qualifications were able to find good employment without facing much competition. Research qualifications were also not prescribed as essential for those iobs. Besides this, a few other factors for lack of research activity in library schools have been : (i) small size of their teaching faculty, (ii) lack of research qualifications and experience by the teaching faculty and practicing librarians, (iii) lack of financial support in the form of fellowships, research grants, etc., (iv) lack of proper library facilities, etc. The number of students who have obtained PhD and MPhil degree in L & IS in the country during the past 10 years is around 15. About 30 are still on the rolls in library school.

The need for developing research activities is being emphasised and interest being shown by the people in the profession promises vigorous activity during the next 5-10 years. This need has been emphasised in the various reports of the UGC and other professional literature.

It is strongly felt that some library schools with better facilities should concentrate more on research programmes rather than on the usual training courses and should strive to attain the status of centres of advanced studies, like other disciplines under the UGC scheme for such centres. Some of the areas which could be fruitfully taken up for research are : user studies : subject indexing;

classification and cataloguing; information systems and services; management of libraries and information systems; computers and information services, library buildings and equipment; and public libraries & literacy.

3.5 Student Characteristics

The majority of the students joining the Bachelor's degree courses, which is the first professinal degree, is fresh from the universities. It is always felt that although students with better qualifications are joing this course, (most of them having a good basic master's degree and some even with PhD degree) many of them do not possess such traints as proper aptitudes for library work, a strong general background, an interest in books and users, and a good personality, all of which are viewed as essential for being a competent professional librarian.

3.5.1 *Some Problems of Issues*

(i) While there is no doubt that these days students with better academic qualifications are admitted in the course, yet it is generally found that in each year the number of academically competent students is quite small. This may perhaps be because of the overall gradual deterioration in the academic standards in colleges and universities in the country during the past 15-20 years of vast expansion in education at higher levels.

(ii) It is generally found that many of these students do not join the course because of any prior planning of their career or with any motivation to work in the profession of L & IS. On priority basis, most of the bright students still prefer to join certain well recognized professions such as medicine, engineering, banking, accounting, etc. Those with good qualifications who join the course (and quite a few of them are left overs) are those who expect, comparatively speaking, better employment opportunities in this profession.

(iii) How to attract good students, particularly with background in sciences or even in social sciences (with background of subjects such as science and technology, or medicine are still rare) is an important question which requires our careful attention. The situation is certainly of somewhat paradoxical nature because of the fact that employment opportunities in L & IS have vastly improved in the country during the past 15-20 years and quite a large number of senior positions in universities and special libraries are lying vacant. Incentives in the form of scholarships, fellowships, etc. are being offered but with less satisfactory results still. One possible reason seems to be that young graduates are not well informed about the career opportunities in this profession and there is certainly a need to acquaint them about it during their studentship days in colleges and universities as well as through lectures, brochures, radio talks etc.

3.6 Employment Opportunities

As mentioned earlier, the annual output of B Lib Sc/B L I Sc degree holders is estimated to be about 1500, of master's degree holders about 150, and of Associateships is not more than 25. The number of students coming out with M Phil and PhD degrees is still insignificant. Because of the fact that there still is no system of manpower planning for the profession, the vast annual increase in the number of library science graduates has gradually led to a situation of unemployment in the country.

The situation is becoming all the more difficult because of the fact that new library schools are established or Master's degree courses are added to the existing Bachelor's degree programme without making a survey of the existing library school(s) and their courses and also without estimating the manpower needs at different levels, in a state or region.

Also unfortunately it is found that a new library school is generally started without first ensuring the availability of adequate resources such as teaching staff, books, financial support, buildings, etc. It is strongly felt and recommended by different seminars, workshops, etc. that the urgent need in the profession is of consolidation and improvement rather than expansion of the existing training programmes in the country.

3.7 Accreditation

With the undue increase in the number of library schools the quality of the training programmes has certainly got affected adversely. At present there is no system of accreditation as such of the library schools at the national level. The UGC is charged with the responssbility of ensuring and maintaining proper academic standards of higher education in the country, but untill now its role has generally been of a recommendatory rather than of an accrediting body. The need for creating a proper system of accreditation has, therefore, been felt but a suitable mechanism for this purpose has yet to be devised.

Certain standards with regard to the number of full time teachers at different levels, their qualifications, library science collections, number of non-teaching staff, physical facilities, etc. have been discussed and useful recommendations have been made by the Workshop (1973) and Seminar (1977) held at the University of Delhi as well as by the UGC panel on library and information science. It has also been emphasised that library schools should conduct courses only at the postgraduate level, and that the under-graduate level courses should fall under the purview of library associations, women's polytechnics and central libraries.

3.8 Place of Library Schools

Majority of the university library schools are already constituted as full fledged teaching departments like other teaching departments in their respective universities. About 75% of these library schools have full time teachers and heads; the others still function under the respective university librarian who has the additional responsibility for the school. As mentioned earlier, the trend however is to separate the library schools from the administrative control of the university librarian and appoint full time teachers. As such in countries as the United States, Canada and the United Kingdom, this practice is gradually proving to be more conducive to the overall development of iibrary science education and research in the country.

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APPENDIX I

Courses as Recommended by the UGC Panel on Library and Information Science

1 BACHELOR OF LIBRARY & INFORMATION SCIENCE (B Lib Sc)

1.1 Objectives

1 A fundamental understanding of the historical development of libraries and library materials and the role of the library in the educational and social milieu;
2 To provide training in the principles, methods and techniques of modern library management, and
3 To provide broad acquaintance with information systems, networks and services.

1.2 Scheme of Papers

1 Library and Society
2 Library Classification (Theory)
3 Library Classification (Practice)
4 Library Cataloguing and Subject Indexing (Theory)
5 Library Cataloguing and Subject Indexing (Practice)
6 Reference and Information Sources
7 Reference and Information Services
8 Library Management and Administration

2 MASTER OF LIBRARY AND INFORMATION SCIENCE (M L I Sc)

2.1 Objectives

1 To provide traing in research methodology;
2 To develop knowledge in the latest techniques of information storage, transfer and retrieval.
3 To study at depth any one type of library or operation or scrvice; and
4 To provide proficiency in the design, development and application of advanced techniques and tools in the management of diverse type of libraries.

2.2 Scheme of Papers

1 Universe of knowledge. Its development and structure.
2 One of the following :

(i) Information Storage and Retrieval;
(ii) Depth Classification.

3 Information Systems and Programmes
4 Information and Literature Source in any one of the following :

(i) The Humauities;
(ii) Social Sciences;
(iii) Science;
(iv) Medical Science;
(v) Engineering & Technology; and
(vi) Agricultural Sciences, etc.

5 One of the following :

(i) Computer Application in Libraries/Information Centres.
(ii) Comparative Librarianship
(iii) Library and Information Science Education

6 Operations Research and Systems Analysis.
7 One of the following :

(i) Public Library System;
(ii) Academic Library System;
(iii) Research and Technical Library System;
(iv) Agriculture Library System;
(v) Medical Library System; and
(vi) Engineering & Technological Library System.

8 Project & Dissertation

Note : In case the semester pattern is followed for B Lib Sc and M L I Sc examinations, the above scheme of papers may be divided accordingly for each semester.

MANPOWER DEVELOPMENT IN R & D INFORMATION CENTRES

U R SHARMA

1 INTRODUCTION

Three elements of the information process are the information or the recorded knowledge, the user and the person, who possesses the information. Of these three elements the information main is of vital importance. He processes the information for its quick and the timely dissemination in easily assimiliable form. The research scientists use the literature available with their colleagues, in libraries or elsewhere, they digest it and generate new knowledge for use by the posterity. In the absence of these sources they seek help of information specialists or librarians, which in turn consult various tools at their command. Not only that these information scientists search the information, but they select the relevant literature, acquire it, sieve the information, and store, it for dissemination after proper indexing. The cycle of information is as shown in Fig 1.

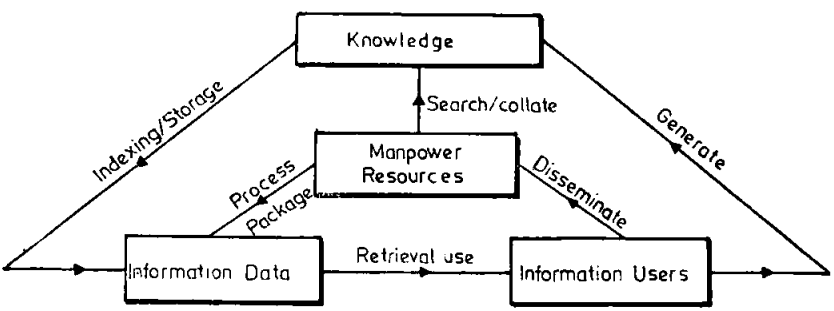


Fig. 1

Thus the information specialist can rightly be called the pivot of the infor-

mation system. He is the backbone of information handling process. The enormous knowledge generated by the scholars and printed in scientific publications would have remained unutilized, had the information specialists not put the information before the users in reprocessed and repackaged form and made easily accessible.

2 PRESENT STATUS

In India it has taken more than fifty years for librarianship to establish. Before 1930 there was hardly any university or training centre. Today we have 42 universities in the country who conduct study at post-graduate level, i.e. Bachelor's degree in library science or ML IS. Nine universities enrol students for PhD degree and Delhi University started M Phil programme since July 1978. Library Associations in States anda ssociations like ILA, IASLIC and GILA are contributing their mite towards manpower development.

The syllabi of B Lib Sc and M Lib Sc courses have undergone drastic changes to achieve parity with expanding scientific institutions and industries. With better know-how and indigeneously developed equipment and machineries there has been rapid expansion in the R & D institutions. Due to technology transfer and the incentives given by the government for import substitution, the information work has increased manifold, but the manpower required for information handling has not been satisfactory. Though universities have played leading role in developing manpower needed for the R & D Centres, but not with the same pace as it was required. The information scientists and librarians took up the challenging job in their respective R & D establishments to explore the information needs in setting up the information centres and created the infrastructure. Irrespective of the academic or professional qualifications they created a place for themselves. There was a healthy trend that whenever qualified and trained personnel were not available, persons were drawn from research and put on information job in their spare time. This gave a new dimension to the discipline.

2.1 Need for Manpower Development

The unhappy situation in the field of library and information science was that development was not commensurate with the advances in other fields. With the result that old techniques failed to cope up with the complexities of the literature generated. Soon the necessity was felt for training the library science personnel for documentation and information search in specialised areas. Institutions like INSDOC and DRTC took the lead role in training the persons engaged in information work. The organisations like Department of Science and Technology (DST), New Delhi, Small Industries Extension Training Institute (SIET), Hyderabad, and Defence Scientific Information & Documentation

Centre (DESIDOC), Delhi, also conduct training courses, refresher and short-term courses for working librarians. Under the NISSAT Plan many national information centres, sectoral centres and regional information centres have been set up, which has given impetus in manpower development to handle the information activities in the country.

2 2 Library & Information Science as a Discipline

It is a happy augury that with the scientific and technological advancement and establishment of a network of industrial establishments, the information work has achieved great importance. Today there is hardly any R & D unit without the information division attached to it. This is one of the factors responsible for recognition of library and information science as a discipline. Today, be it a university, an industrial establishment or a government research department a professional heads the information unit. This is a healthy sign and has increased manifold the job opportunities and career prospects of librarians and information specialists. In book and publishing trade too, we find library professionals doing sales and marketing jobs quite efficiently. Bibliographies and select list on specific topics from NTIS Reports are prepared by leading publishers, who deal in procurement of report literature. Though the purpose of such bibliographies is to enhance the sale of this type of literature, but the lists are good example of information search. They use the latest techniques of choosing subject headings and search terms by taking help of thesauri. These agencies are giving employment opportunities to information science people in salesmanship.

3 PROBLEMS

There are problems which an R & D information centre has often to face. The personnel problems could be organisational, functional, technological and financial in nature. It is always a problem to select right type of person with laid down qualitative requirements (QRs) within the framework of recruitment rules.

3.1 Development of Manpower

A person holding a bachelor's degree or master's degree in Library and Information Science from a university or from a recognised institution is inducted into the service as a generalist and specialises in a specific area after serving for few years. But sometimes a fresher is engaged on a specialised area in a bigger organisation. It does not make him a good generalist if he is asked to take charge of a library. Similarly, a person working as generalist for a considerable

period, cannot function so efficiently as a specialist towards the fag end of his career, This results in fitting a square peg in a round hole.

3.2 Career at National Level

One of the major hurdle before the profession is that personnel working in different sectors or institutions have different career prospects though they may have almost same functions. There is no all-India character in its cadre. This is due to the fact that information people have been the ex-cadre employee of an organisation. Few individuals rose up the ladder due to their own efforts and capabilities but the others suffered due to non-existence of a regular service. Institutions like CSIR, BARC, DRDO, BHEL, ICAR and few others have avenues for promotion and chances of career development. Scientific information and documentation has been recognised as a discipline in these institutions at par with pure and applied science disciplines for assessing performance of employees after a fixed period for promotion to next higher grade.

4 SOLUTIONS

The basic strength of any organisation lies in its employees. This statement holds good in all circumstances and for all times. Therefore, to achieve its goal, an organisation must take care of its staff-members once they pass all screening test and have been enrolled as members of the institution. The head of the information centre must handle the employees with utmost care and delicacy. The centre should use management techniques in manpower planning, human resources administration and to fight professional obsolescence. Some of the techniques have been suggested here to achieve the objectives.

4.1 Choosing Right Type of Persons

Having set the goals and functions of an information centre the next priority after space, is the selection of the staff, the pivot of the centres. Ingenuity of the management lies in selecting right type of persons after formulating QRs based on the job requirement. Not only selection but placement of right person in appropriate heirarchical position is essential.

4.2 Incentive and Career Development

The aims and objectives of the organisation should clearly be spelled out to its employees to achieve maximum benefit and cost effectiveness. The suggestions and useful contributions made by the professionals should be given due weightage and must be valued. This creates a sense of job satisfaction amongst

the information specialists and they are normally bound to work hard and earn a good reputation for themselves as well as for the organisation. The trained library specialists should not only be attracted for the job but should also be retained in the department. Their rich experience contributes towards higher efficiency and greater output in information retrievel.

4.3 In-service Training/Refresher Courses

The continuing education programme is a power tool in the hands of the management. This is an essential pre-requisite for the development and growth of the information centre. As we know an information centre always grows and the person which acquant himself with the literature around him should not be lost by any cost. Trained and skilled staff is an asset for an information centre. Facilities should be given to the staff in the form of leave, financial assistance and in-house training courses during working hours. This will create confidence among the professionals. The highly skilled professionals should be sent to higher training institutions within and outside the country to keep them abreast of latest developments and new concepts.

4.4 Congenial and Healthy Working Environment

To provide the right type of climate for working is the primary responsibility of the management. For example the Reference Assistant should be provided room with telephone and reference tool and freedom of work to achieve the desired results. He has to establish an excellent rapport with the users in order to satisfy them with information requirements. Staff meeting should often be arranged to discuss matter of common interest and for providing better services. A climate of learning should be created and efforts should be made for harnessing the talents and potentialities of the staff.

4.5 Creativity

Creativity cannot be measured with any yardstick or objective tests, this depends upon the inherent quality of a worker. The creative skill has to be sharpened. The qualified, willing and the creative information specialists should be allowed to write papers for conferences seminars to express their ideas freely. The creativity should not be allowed to suppress at any stage. New processes, techniques and technologies are being developed every day. The management should be on the look out for adopting these to create enthusiasm and interest among the creative and skilled professionals. Training in latest techniques infuses new blood in them. Procedural delays and other

bottlenecks should not come in the way of replacement of old machine and equipment and furniture etc with new for better service.

4.6 MANPOWER FOR COMPUTER-BASED INFORMATION SERVICES

We have been talking about computer applications to Library & Information Science for a considerable period. The start has already been made in some pioneering institutions in the country. But it has not gained momentum. Unless we introduce the topic in MLISc courses, the progress will be slow. We know that computers have best capacity for work and can handle huge data. Institutions like BARC, DST, INSDOC, CSIR. IARI, IPAG, and DR&DO where computer facilities are either available or would soon be available, can divert their spare capacity to the field of library and information science field also. Though practising librarians are not expected to be system analysts or programmers but being the participents in information search of various data based information handling techniques as one of the topics for their curriculum. Training of librarians and information scientists in this area whould help to communicate better with the computer-specialists and put before them the reader's views and their problems on computer-based information services in a better way.

4.7 FACULTY DEVELOPMENT PROGRAMME IN UNIVERSITIES

In order to realise the type of working environment and the problems the students may have to face after finishing their education in library and information science, they should be oriented and exposed to such an environment during the course of their study. For this purpose continuing education of the faculty members should be encouraged. They should freely mix up with the information specialists, who have rich experience of users education and information gathering habits of readers and know their problems well. Part-time lecturers may be drawn from information centres for special areas of curriculum. Exchange of teachers would definitely improve the quality of teaching. Such need was felt by Dr S R Ranganathan during early sixtees and he directed such programmes on annual basis in DRTC.

4.8 LIBRARY & INFORMATION SCIENCE AS A SUBJECT IN DEGREE COURSES

There is no dispute about the fact that library and information science is a vocational study. Many Indian universities have introduced commercial practice, stores and book keeping and tourism as subjects for their Bachelor's degree. It will be appropriated if the universities include library science as one of the subject at graduation lavel.

5 CONCLUSION

There is a scope for improvement in the information services and developing manpower by using management techniques. Choosing right type of persons, positioning them on right jobs, creating opportunities and offering incentives for improving their qualifications places an organisation on sound footing. Healthy and congenial working conditions and facilities of continuing education programmes helps in gaining confidence of employees and exploiting their talents. Faculty development at university level and inclusion of library and information science as a subject in BA degree of Indian universities would help in recognition of the profession on all India basis.

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NATIONAL INFORMATION SYSTEM FOR EDUCATION IN INDIA

J L SARDANA
S L VERMA

1 INTRODUCTION

Education is the most important single factor in achieving rapid economic development and technological progress and in creating a special order founded on the values of freedom, social justice and equal opportunity. In view of this the Planning Commission has been laying emphasis on the development of education.

2 CONSTITUTIONAL PROVISIONS

The Constitution of India is 'federal' in its nature, (the word, 'federal', however, does not occur even once any where in this document). As in other federal constitutions of the world, state power has been divided between the centre (Union) and the states (Units). The first list (Union List) contains 97 items over which the centre alone has legislative jurisdication. The State List contains 66 items over which the states have exclusive legislative jurisdiction. The concurrent list (List III) contains 47 items over each of which both the centre and the state can exercise their legislative jurisdiction. However, where there is a conflict of laws in this 'concurrent field' the laws made by the Union prevail over those promulgated by the states. The relevant entries in so far as 'education' is concerned are available under entry 63, 64, 65 in the Union List, entry 11 in the State List, and 20, 25 in the Concurrent List.

Turning our attention now to the legislation enacted by Parliament as a result of the entries in the Union List and the Concurrent List we find that several coordinating agencies have come into being. The foremost of them are the University Grants Commission, the Indian Medical Council, the Bar Council

of India, the Central Advisory Board of Education, and the all India Council for Technical Education.

The education though now is a concurrent subject yet the basic functioning is with the state government and the overall system has hardly been changed. Thus for all practical purposes it can be assumed that the subject of education is being administered as a state subject.

3 DEVELOPMENTS IN EDUCATION

In the post-independence period, a major concern of the Government of India and of the states has been to give increasing attention to education as a factor vital to national progress and security. Problems of educational reconstruction have been reviewed by several commissions and committees. Such as : the university Education Commission (1948-49), the Secondary Education Commission (1952-53), and the Education Commission (1964-66). The Education Commission surveyed the whole field of education and its contribution has been most significant. The Commission was appointed on 14 July, 1964 to advise the Government on 'the national pattern of education' and on the general principles and policies for thed evelopment of education at all stages and in all aspects. The Commission known as Kothari Commission has emphasized education as a main instrument of change. The present system broadly caters at different levels: elementary, secondary, senior secondary and higher, and also provides for vocational, professional, technical, special and adult education, etc., at different levels.

The history of Indian education is a picture of both light and shade, of some outstanding achievements alongwith many outstanding failures. As a result of the system of education that we have developed during the last 150 years we have now more than 120 universities (or similar institutions), 4,500 affiliated colleges, 40,000 secondary schools and 6,00,000 elementary schools, 3.5 million teachers, 100 million students and an annual expenditure of Rs 25,000 million, which is next only to that on defence. It has given us a high level trained manpower whose size is perhaps largest in the world and the top-levels of which are comparable to those of leading countries in the world. It is this manpower which now provides the key personnel in all walks of our national life, and also enables us to help several other developing countries.

4 NEED FOR NATIONAL INFORMATION SYSTEM

Keeping inview the developments in the fields of science and technology, social sciences, and the demands of the users in the field, national information systems have either been set up or are being planned. Education, broadly perceived as a seamless continuum of life long learning, is essential for human resources development at every age level. Programme of human resources development have a four fold perspective ;

(i) to prepare individuals for assuming their role as responsible citizens;
(ii) to develop in them scientific outlook, awareness of their rights and responsibilities as well as consciousness of the process of development;
(iii) to sensitise them to ethical, social and cultural values which go to make an enlightened citizen; and
(iv) to impart to them knowledge, skills and attitudes which would enable them to contribute to the productive programmes in the national development.

In the realisation of this, educational system and programmes have to be directed towards a set of goals and tasks to achieve these, the educational system, employs substantially large manpower and the demand for proper and well planned information system in the country is necessitated,

4.1 Magnitude of Investment of Education

A study of the growth of investment in education has revealed continuous increase in expenditure on education. Expenditure on education went up from Rs 153 crores in first five year plan to Rs 786 crores in the fourth five-year plan, Rs 1,285 crores in fifth plan and Rs 2,523.74 crores have been provided in sixth five year plan.

4.2 Nature of Information Required

The educational information system is to meet the requirement of different categories of users. Most important information to be collected and generated/ supplied by the proposed information system, besides the usual information requirement of the user, would be in the area of educational statistics. It would be therefore, relevant to examine briefly the present system of collecting this type of information and making the same available to the users.

4.2.1 *Nature of Information Sources and Agencies*

Collection and publication of educational statistics is largaly the responsibility of the Ministry of Education, Government of India. The major sources and organizations dealing with the data on education are : (i) Union Ministry of Education; (ii) State Department of Education; (iii) University Grants Commission; (iv) Technical/Professional Bodies, who collect and maintain the data on intake/enrolment and also on outturn but, do not publish are : (*a*) Indian Council of Agricultural Research (ICAR); (*b*) Directorate General of Health Services (DGHS); (*c*) Medical Council of India; (v) National Council of Educa-

tional Research & Training; (vi) Directorate General of Employment and Training; (vii) Census of India; (viii) National Sample Survey Organization; (ix) Planning Commission; (x) National Institute for Educational Planners and Administrators; (xi) Research Institutions; and (xii) Specially designed surveys for specific purposes, etc.

Of all the sources, the Ministry of Education is the most important and is the fountain head of information on a variety of education items. Ministry of Education and many other institutions bring out very useful statistical sources of information.

5 EXISTING INFORMATION SYSTEM FOR EDUCATION

There is no such system for education in existence in India at present. The information is being provided to the users by different libraries and information centres. However, at international level system namely ERIC does exist.

5.1 Education Resources Information Center (ERIC)

The educational resources information center (ERIC) is a nation wide information net-work for the dissemination of educational information. It is designed to accomplish three main objectives:

(i) to guarantee ready access to the world's literature in education in English language;
(ii) generate new information products by reviewing, summarizing and interpreting current information products on pariority topics. Products include bibliographies, state of knowledge papers, critical reviews and interpretive summaries;
(iii) infuse information about educational developments, researchfin dings, and outcomes of exemplary programmes into educational planning and operations.

The ERIC system was begun in 1965 with the production and dissemination of the catalogue of selected documents on the disadvantaged. Development of the ERIC programme began with the establishment of the first 11 clearing houses between March and June, 1966. Presently it is the net-work at 19 clearing houses.

6 NATIONAL INFORMATION SYSTEM

A national information system is basically a netwqrk of existing information

resources together with new services for identified gaps, so co-ordinated as to reinforee and enhance the activities of the individual units and thus enable specific categories of users to receive the information relevant to their needs and abilities. Management of national system implies a policy plan to define priorities, co-ordination of resources, and a systematic but flexible approach to information dissemination.

According to International Bureau of Education, the improvement of education information helps in organization, structures, content, methods and evolution. The information system for education should, therefore, provide for information related to education-considered as the generation and communication of ideas, facts, figures, etc., at the local, regional, national, and international levels.

6.1 Objectives

The following are the objectives of the national information system for education :

(i) to identify the present and potential users of information;
(ii) to identify the services to be provided to the users by the information system;
(iii) to make available all relevant information in a meaningful form and within a reasonable time to planners/decision makers, teachers, authors, etc., for planning and development of educational policy for India;
(iv) to evolve a system of coordination amongst the existing information systems at the national and international levels in the fields of education and other allied areas; and
(v) to provide for adequate and qualified manpower required for the efficient and effective implementation of the programmes to be undertaken by the proposed national information system.

6.2 Functional Responsibilities

The system would perform the following responsibilities :

(i) to plan and coordinate the activities;
(ii) to set standards
(iii) depository for net-works information;
(iv) to make the policy;
(v) to serve the entire discipline;
(vi) to train the manpower;
(vii) to handle the information;
(viii) to establish links with information system in the discipline;
(ix) to build data bank;
(x) to prepare various services for dissemination of educational information.

6.3 Users of the System

The following are the categories of the users to whom the information is supplied in a meaningful form within a reasonable time :

(1) Planners, decision makers, administrators belonging to the central and state government in the field of education;
(2) Major institutions devoted to education as a discipline;
(3) International organisation such as commonwealth education secretariate and UNESCO, etc.;
(4) Teachers, authors; and
(5) Individual research workers.

6.4 Organisational Structure

6.4.1 *Centralized and or Decentralized*

Conard has noted that in practice there are many arrangements wherein some services are provided locally and others from a centralised point. His judgement is that the completely decentralised operation is never justified where one is dealing with other than a highly specialized area when, "Information of a particular type is needed by only a single isolated unit, it is probably better to handle this activity as a decentralized operation under local administration. The corollary is that if information is frequently needed by many people at many locations, there is much merit in handling the function on a centralised basis."

Centralization offers the advantages of : greater efficiency; economy; availability of the full resources of a system to any and every component of users. The advantages of decentralisation are : quicker;direct; and personalized services.

There are degrees of centralization and decentralization. The present system will work on the principle of centralization and decentralization. The centralization will be in respect to : coordination, policy, standards, financial and administrative control (partially). The decentralization will be in respect to : geographical and functional collection; storage; analysis; dissemination and retrieval; financial and administrative control (partially).

7 PROPOSED SYSTEM

7.1 Levels of the System

The system will operate at the following levels :

1 National information centre;
2 State information centre
3 District information centre; and
4 Block information centre.

The information system must be planned in such a way so that within its framework it has inter-links with its various sub-system (services centres). The inter-linking must be direct and indirect both depending upon the nature of service a centre produce and utilises.

The whole system may be interlinked among the four sub-systems

7.2 Division of Responsibilities

7.2.1 *National Centre*

The national centre will have the responsibilities :

1 to make the policy;
2 to plan and coordinate the activities;
3 to set standards;
4 to serve as a Central depository for entire networks information/data;
5 to maintain data bank for reterieval of information;
6 to serve the entire discipline;
7 to train the manpower at various levels and support research in information field;
8 to promote use of modern technology for information handling;
9 to eastablish links wilh international systems and their utilization for augmenting national resources and relations with the national information systems in the allied disciplines;
10 to have the responsibility of a referral centre;
11 to bring out of National bibliographies;
12 to compile union catalogue for periodicals, serials and reports, etc.
13 to provide selective dissemination of information (SDI);
14 to provide resprographic services;
15 to provide translation services;
16 to conduct retrospective search i. e. to search the entire data base or a major portion of it against a query;
17 Promotion of cooperative acquisition of foreign information services.

7.2.2 *State Centre*

The responsibilities of the state centre will be;

1 Planning and coordinating the activities of district information centres coming under its jurisdiction;
2 Developing and maintaing document collection in the state as to serve the state base for information work;
3 Giving indexing and abstracting service including SDI (Selective Dissemination of Information services);
4 To compile the bibliographies;
5 To prepare the state catalogues;
6 To make information retrieval on request;
7 To maintain data banks containing educational data pertaining to the state;
8 To arrange translation services;
9 To facilitate reprographic services;
10 To provide educational enquiry services;
11 To act as the contact point for users in the states;
12 To provide for referral service to the state served by the national centre;
13 To survey the information sources of the state and to organise their mobilization for feeding to national centre and for meeting the state information demands;
14 To supply copies of documents available in the centre on request and to arrange for supply of documents not available in the centre through national and or concerned state centres.

7.2.3 *District Centre*

The district centres will perform the following functions;
1 Its main function will be to collect and process information/data at the district level;
2 To feed information generated in the district to state centres;
3 To provide educational information necessary for the functioning of district educational requirements;
4 To act as recipients of information from state centres;
5 To offer personalised services in anticipation;
6 To offer personalised services against specific requests.

7.2.4 *Block Centre*

1 It would be extension for the district centre to collect data from the institutions located in a particular block.
2 It will also serve as a link between the final institution and the district centre for carrying over the changes from time to time in the collection and maintenance of the data.

7.3 Funding of the System

The system will get the financial resources from :

(i) Governmental grants (Central as well as States)
(ii) Organizational grants (Organizations through which the different level centres to operate)

8 CONCLUSION

There exists in the country a very large number of agencies which procure as well as produce educational resource materials viz. 22 states; 9 union territories; government agencies; about 550 Secondary Teacher's Training Colleges and nearly 40 University Departments of Education. There is a wealth of material in the form of books, journals, reports, tapes, charts, models, etc. But, no concerted attempt has been made to systematically process and disseminate the information contained in this material so that a researeh worker can get access to the right material. It is, therefore, of compelling importance to establish an Information System on the basis of an existing nucleus.

The national information centre for education should be established such that the existing resources can be effectively used. The NCERT has the infra structure required for the purpose. At state level the State Institutes of Education may be suitably augmented with the resources and at the block level the information may be provided through the District Central Library.

The proposed system should work in close cooperation with the National social science information system and should operate as a sectoral system in the grid.

NATIONAL INFORMATION SYSTEM FOR GEOSCIENCE IN INDIA

ROSHAN RAINA

1 INTRODUCTION

The exponential growth of scientific, technical or economic literature has led to the establishment of information systems in many fields. Exchange of information at national, regional and international level is becoming a must for the growth and development of scientific discipline. For any scientific discipline, the ideal agency to ensure : (a) adequate bibliographical control of information; (b) right contact between the user and information; and (c) free information flow at local, regional, national and international level, is a well planned information system having a network of centres and sub-centres all over the country.

2 GEOLOGY—HISTORICAL BACKGROUND

The science of geology—like science itself-was in its infancy at the end of 18th century. There were no professionals and the main channel of communication was the hand written letter.

Development in geology took place with the establishment of specialised societies, the first of these being the Geological Society of London, established in 1807.

19th century saw the improvement in university education and government becoming more and more interested in geological studies. Establishment of Geological Surveys in various countries helped to make the discipline a professional one which led to its recognition as a growing scientific discipline.

20th century now witnesses increased attention being paid towards geoscientific research, because it is the science that is concerned with: (a) exploration and exploitation of the resources of the earth; (b) exploration and exploitation of the wealth of oceans, particularly oil, gas, minerals, etc; (c) solving problems

related to the increasing demands for energy; and (d) solving problems related to the deterioration of physical environment.

Scientific research and application of results of research for the progress and prosperity of nation is directly dependent upon availability of information. Growth of geological profession coupled with the *"publish or perish"* syndrome has now led to the enormous growth and fragmentation of geoscientific information. In view of the enormous expenditure on the geoscientific research and consequent output of geoscientific literature, it is felt that we are already too late for having a well knit information system for geoscience in our country.

2.1 India

The systematic study in geological science in India began with the establishment of Asiatic Society of Bengal in 1784 and the earliest geological contribution was published under the title "Barren Islands and Valcanoes" in one of the Society's important journals "Asisatic Research" in 1795.

Geological research in India gained momentum with the establishment of Geological Survey of India (GSI) in 1851. GSI, which began its activities with one geologist, one writer and one peon is now one of the largest scientific departments of the country spread all over the country through its regional centres and circle offices. (Annexure H)

46 Indian universities, 4 Indian Institutes of Technology and Indian Institute of Science at Bangalore are all engaged in geosientific study and research through their respective geoscientific departments. The details are given in Annexure A, B and E

Some important government departments that are engaged in geoscientific investigation and research include : Oil and Natural Gas Commission (ONGC); Indian Bureau of Mines (IBM); Central Ground Water Board (CGWB); Atomic Minerals Division (AMD), National Remote Sensing Agency and Directorates of Geology of different states, etc. (Annexure G).

Important CSIR organisations like National Geophysical Research Institute (NGRI); National Institute of Oceanography (NIO), Central Glass Ceramic Research Institute (CGCRI); Central Metallurgical Laboratory; etc. are also concerned with some aspects of geological research. (Annexure E).

Various central and state level autonomous research organisations like Wadia Institute of Himalayan Geology (WIHG); Birbal Sahni Institute of Palaeobotany (BSIP); Centre of Earth Science Studies (CESS), Kerala; etc are also wholly or partialally engaged in geological investigation and research. (Annexure E).

Some professional societies and associations have also contributed significantly towards the growth and development of geoscience in India, by way of bringing out journals, organising seminars, etc. Important ones include; i) Geological Society of India, Bangalore; ii) Mining, Geological and Metallurgi-

cal Institute, Calcutta; iii) Indian Geologists' Association, Chandigarh, iv) Indian Society of Earth Sciences, Calcutta; v) Indian Academy of Geoscience, Hyderabad; vi) Mineralogical Society of India, Mysore; vii) Palaeontological Society of India, Lucknow, vii) Indian Association of Geohydrologists, Calcutta; viii) Indian Sedimentologists' Association, Aligarh, etc. (Annexure D).

3 EXISTING INFORMATION INFRA STRUCTURE

Infrastructure, in its unidentified form, already exists. GSI has got its central library located in the head quarters at Calcutta. GSI regional centres and circle offices have also built up their own libraries, thereby forming a network of information centres, meeting the information needs of their respective clientele.

Like-wise every research centre, university department or any other organisation engaged in geoscientific research is equipped with a resourceful library/ information centre.

4 NATIONAL INFORMATION SYSTEM (MODEL 1)

Information system is an organised procedure for acquiring, organising storing and retrieving information to meet the needs of users. It functions through a well organised centre, having an automatic regular check upon the various services performed by the centre. To bridge the gap between the information and the user a national information system for geosciences is proposed on the lines given below :

The Central Library of GSI with a collection of more than 4 lakh volumes is the most resourceful library in geoscience in India. The documentation, bibliographic, reprographic and other information services rendered by the library make it idel to act as National Information Centre for Geoscience in India (NICGI). The regional centres of GSI alongwith other regionally located research centres like WIHG, NGRI, ONGC, NIO, etc., can act as regional information centres for the proposed national centre. The circle offices of GSI alongwith other locally located organisations engaged in geological investigations can serve as local information centres.

A plan for national information system in geosciences is represented by *Model 1.* The plan is proposed to ensure free flow of geoscientific information at local, regional, national and international level.

4.1 Objectives

Objectives of the proposed National Information System for geoscienees could be as follow :

1 to identify, study and survey the existing information infra-structure in the country;
2 to examine how the existing information resources and services are related to the needs of the geoscientists of the country;
3 promote and develop existing information service and resources to meet the information requirements of our geoscientists;
4 co-ordinate, up date, stream-line and control the activities concerning acquisition, organisition and dissemination of information through : (i) co-operative action; (ii) dividing the responsibilities among the other participants in the network; and (iii) making use of new techniques in the transfer and utility of information;
5 to conduct surveys for identifying the most relevant-therefore most useful—resources in geosicences and select from those information soures, the items of information likely to meet the users' demands.
6 helping users overcome problems like language; increasing costs, privacy; copyright; political; etc. in using the desired information;
7 to serve as a repository and to organise a data bank for all geoscientific information;
8 to ensure adequate bibliographical control of all the geoscientific information by bringing out, on regular basis, publications like indexing services; abstracting services; translation services; bibliographic services (on various aspects of geoscience), etc. It could be better to enhance the scope, coverage and standard of already existing services rather than increase their number;
9 to undertake and bring out up-to-date union catalogue of the holdings of all concerned organisations. This can be brought out on the basis of type of literature covered e.g. *books*, *periodicals*, *reports*, *maps*, *reprints*, *microfilms*, *tapes*, etc;
10 to maintain an up-to-date record of geoscientific research output of the country;
11 to avoid duplication in geoscientific research and to keep the interested scholars current about the latest developments, it would be worthwhile to bring out, on regular basis, publications like : (i) research in progress, (ii) lists of unpublished research literature, covering dissertations, theses, etc., (iii) lists of forthcoming seminars, symposia, conferences in geosciences, (iv) news-letter giving information items of current interest in various aspects of geoscience; v) geosciences in India—facilities, problems and prospects;
12 to make arrangements for the training of information personnel and information users. Users be considered as the producers as well as consumers of information;
13 establish and maintain links with other national information systems in

the country, such as INSDOC, NISSAT, ICAR, etc.,

14 establish and maintain links with its sister organisations in other countries and with other information systems in other countries to ensure free flow of information at international level.

4.2 Suggestions

The proposed centre can fulfill the objectives as outlined above if the following few suggestions are taken into consideration without any further delay.

1 In the first instance the government and other interested agencies should consider the geoscientific information as a basic ingredient for the growth and development of geoscientific research.
2 National Information System for Science and Technology (NISSAT) should recognise the need and importance of geoscientific information and extend its full support to the proposed information centre.
3 Regional and local information centres involved in the network must cooperate with the centre to enable it to fulfill the objectives by feeding it with the relevant data and working on the lines as suggested by the proposed centre.
4 All the information centres engaged in the network be equipped with trained manpower to run the information centres.
5 Government should sanction grants through NISSAT or through the proposed centre to conduct user surveys for determining their information needs and habits, etc.
6 Wherever and whenever feasible, the organisations involved should sponsor their information personnel to study the working and services of other related information centres in other countries.
7 Government should, through this proposed centre, sponsor seminars and workshops on themes related to the promotion of geoscientific information services in the country.

The system if fulfills the objectives outlined above is bound to achieve the goal of establishing right contact between the right user and the right information at the right time.

5 WORKING OF THE CENTRE : (MODEL 2)

In Dehra dun, we have got as many as 18 important research organisations which include Wadia Institute of Himalayan Geology; Oil and Natural Gas Commission; Geodetic Branch of Survey of India; Indian Institute of Petroleum Indian Photo-interpretation Insititute; Forest Research Institute; Botanical Sur-

vey of India; Anthropological Survey of India; Zoological Survey of India; etc. Of these, the first one is exclusively ment for conducting fundamental researches on Himalayan Geology. Facilities for geoscientific study and research are also available in organisations like ONGC, GB, (SDI); IPI; IIP; FRI; etc., On account of the purpose and resources of the institute, WIHG can serve as a local information unit, aiming at the co-ordination of information activities and services of other organisations of the area. Besides the research centres of Dehra Dun it will also cover the universities of Punjab, Lucknow, Nainital, Garhwal; the associations like Indian Geologists' Association, Chandigarh, Palaeontological Society of India, Lucknow and other related organisations. This local centre can co-ordinate its information activities and services with the regional centre of GSI at Lucknow. This regional centre besides coordinating its activities and services with other local information units can also ensure coordination with other research organisations of the region, which include Birbal Sahani Institute of Paleobotany; Aligarh Muslim University, etc. forming a regional information network. This regional centre can link its activities and services with the proposed national centre.

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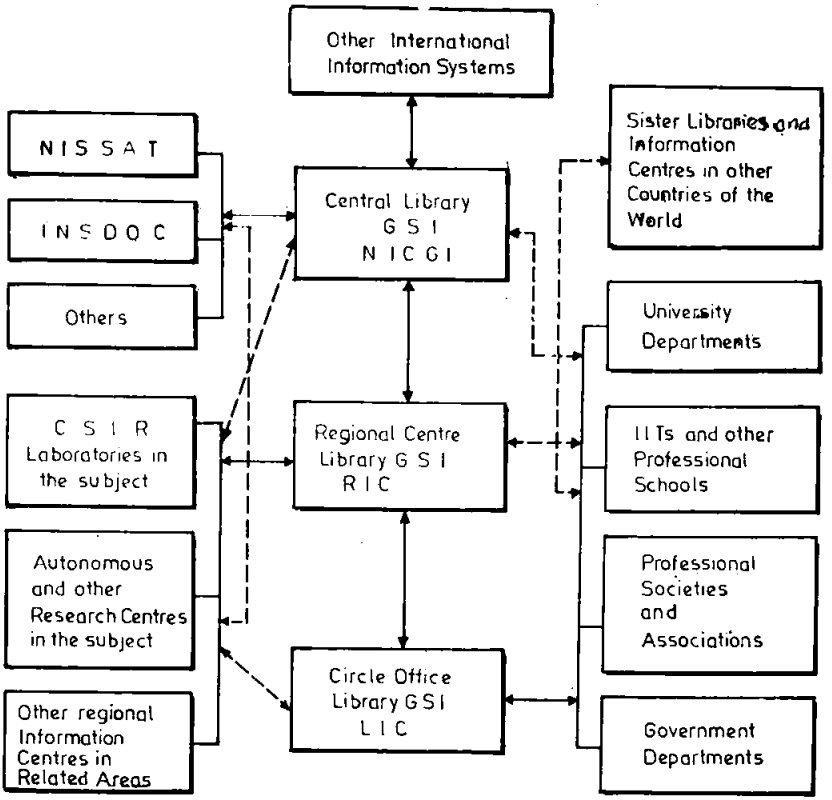
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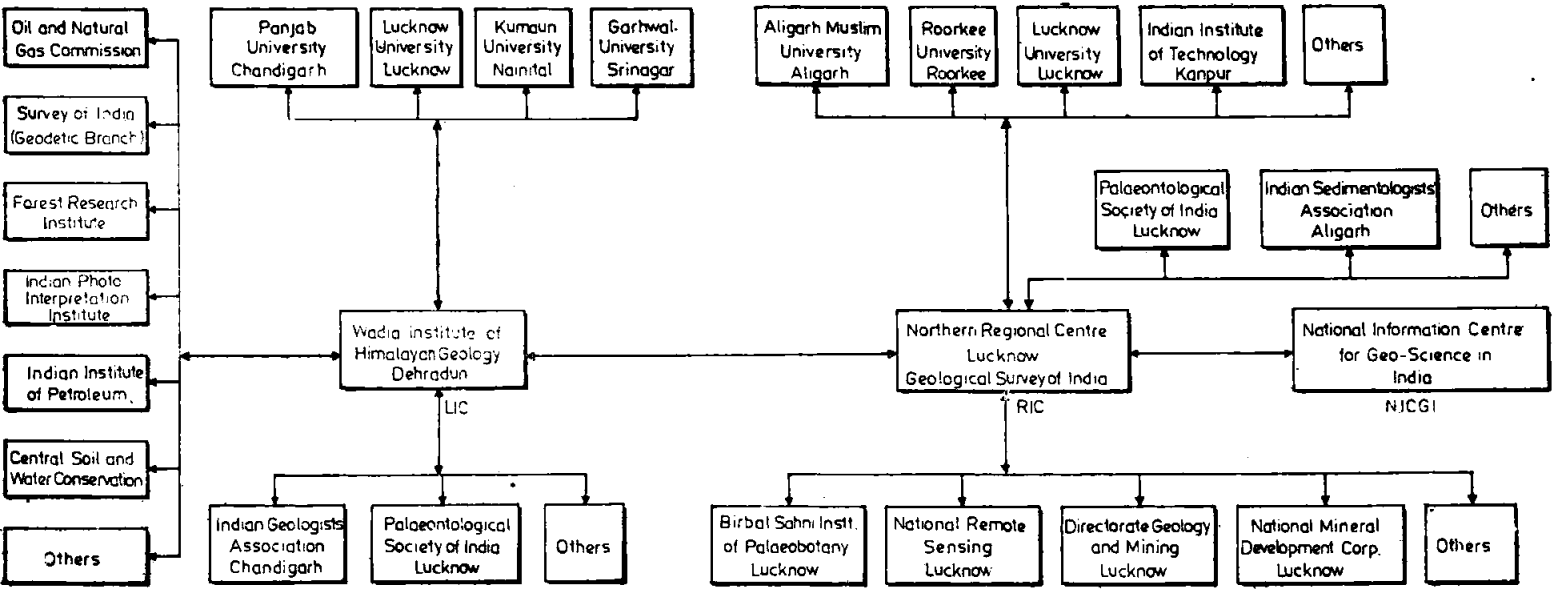
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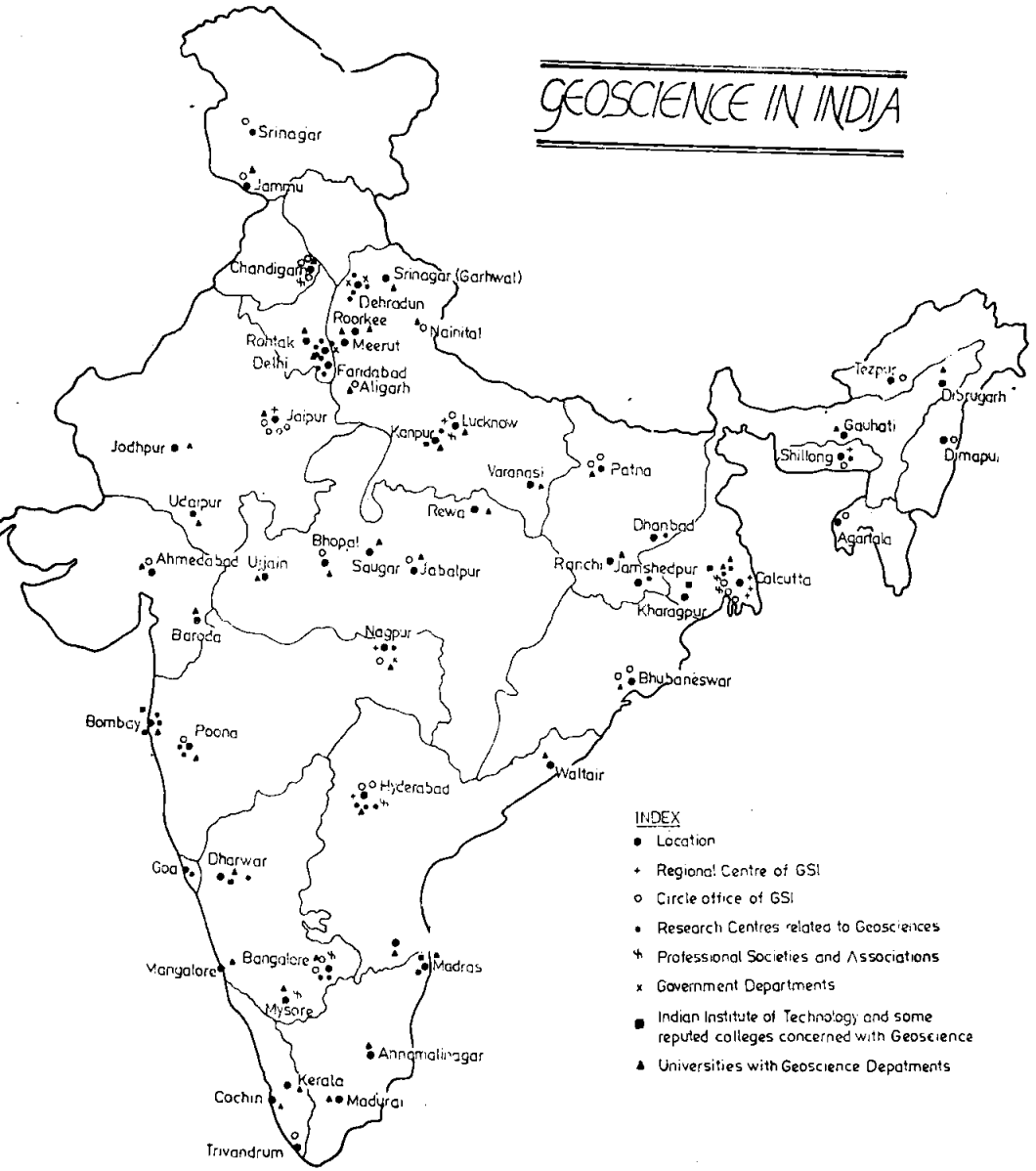
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Model 1. National Information System.



Modol 2. Working of N I C G I


GEOSCIENCE IN INDIA
Srinagar
Jammu
Chandigarh
Srinagar (Garhwal)
Dehradun
Roorkee
Nainital
Rohtak
Meerut
Delhi
Faridabad
Aligarh
Jaipur
Kanpur
Lucknow
Jodhpur
Varanasi
Patna
Udaipur
Rewa
Dhanbad
Bhopal
Ahmedabad
Ujjain
Sagar
Jabalpur
Ranchi
Jamshedpur
Calcutta
Kharagpur
Baroda
Nagpur
Bhubaneswar
Bombay
Poona
Hyderabad
Waltair
Goa
Dharwar
Mangalore
Bangalore
Madras
Mysore
Annamalainagar
Kerala
Cochin
Madurai
Trivandrum
Tezpur
Dibrugarh
Gauhati
Shillong
Dimapur
Agartala
INDEX
Location
Regional Centre of GSI
Circle office of GSI
Research Centres related to Geosciences
Professional Societies and Associations
Government Departments
Indian Institute of Technology and some reputed colleges concerned with Geoscience
Universities with Geoscience Depatments

Model 3

ANNEXURE A

List of Indian Universities with Geoscience Departments

1 Aligarh Muslim University, Aligarh (UP).
2 Andhra University, Waltair (A P).
3 Annamalai University, Annamalainagar (Tamil Nadu).
4 Awadhesh Pratap Singh University Rewa (M P).
5 Banaras Hindu University, Varanasi, (U P).
6 Bangalore University, Bangalore (Karnataka).
7 The Mahareji Sayajirao University of Baroda, Baroda (Gujarat).
8 Bhopal Vishwavidyalaya, Bhopal (M P).
9 University of Bombay, Bombay-32. (Maharashtra).
10 University of Calcutta, Calcutta-73.
11 University of Cochin, Cochin, (Kerala).
12 University of Delhi, Delhi-7.
13 Dibrugarh University, Dibrugarh (Assam).
14 Garhwal University, Srinagar, Garhwal (U P).
15 Gauhati University, Gauhati, Assam.
16 Gujarat University, Ahmedabed (Gujarat).
17 University of Hyderabad, Hyderabad (A P).
18 University of Jabalpur, Jabalpur (M P).
19 Jadavpur University, Jadavpur, Calcutta (West Bengal).
20 University of Jammu, Jammu (J & K).
21 Jawaharlal Nehru University, New Delhi.
22 University of Jodhpur, Jodhpur (Rajasthan).
23 Kanpur University, Kanpur (U P).
24 Karnataka University, Dharwar (Karnataka).
25 University of Kerala, Trivandrum (Kerala).
26 Kumaon University, Nainital (U P).
27 University of Lucknow, Lucknow (U P).
28 University of Madras, Madras (Tamil Nadu).
29 Madurai-Kamraj University, Madurai (Tamil Nadu).
30 Maharshi Dayanand University, Rohtak (Haryana).
31 Mangalore University, Mangalore.
32 Meerut University, Meerut (U P).
33 University of Mysore, Mysore (Karnataka).
34 Nagpur University, Nagpur (Maharsthra).
35 Osmani University, Hyderabad (A P).
36 Panjab University, Chandigarh.
37 Patna University, Patna, (Bihar).
38 University of Poona, Poona (Maharashtra),

39 University of Rajasthan, Jaipur (Rajasthan).
40 Ranchi University, Ranchi (Bihar).
41 University of Roorkee, Roorkee (U P).
42 University of Saugar, Saugar (M P).
43 Sri Venkateswara University Tiruputi (A P).
44 University of Udaipur, Udaipur (Rajasthan).
45 Utkal University, Bhubaneswar (Orissa).
46 Vikram University, Ujjain (M P).

ANNEXURE B

Institutes of National Importance having facilities of Geoscientific Study and Research.

1 Indian Institute of Technology, Bombay (Maharashtra).
2 Indian Institute of Technology, Kanpur (U P).
3 Indian Institute of Technology, Kharagpur (West Bengal).
4 Indian Institute of Technology, Madras (Tamil Nadu).
5 Indian Statistical Institute, Calcutta (West Bengal).

ANNEXURE C

Some Important Colleges having Facilities for Geoscientific Study and Research.

1 Presidency College, Calcutta (West Bengal).
2 Presidency College, Madras (Tamil Nadu).
3 St. Xaviers College, Bombay (Maharashtra).

ANNEXURE D

Professional Societies and Associations

1 Geological Society of India, Bangalore (Karnataka).
2 Indian Academy of Geosciences, Hyderabad (A P).
3 Indian Association of Geohydrologists, Calcutta (West Bengal).
4 Indian Geologists Association, Chandigarh.
5 Indian Sedimentologists Association, Aligarh (U P).

6 Indian Society of Earth Sciences, Calcutta (West Bengal).
7 Mineralogical Society of India, Mysore.
8 Mining Geological and Metallurgical Institute, Calcutta (West Bengal)
9 Palaeontological Society of India, Lugknow (UP).

ANNEXURE E

Some National Institutes concerned with Geoscientific study and research

1 Birbal Sahni Institute of Palacobotany, Lucknow (U P).
2 Central Mining Research Station, Dhanbad (Bihar).
3 Central Seismological Observatory, Shillong (Assam).
4 Central Water & Power Research Station, Poona (Maharashtra).
5 Indian Academy of Sciences, Bangalore (Karnatka).
6 Indian Institute of Geomagnetism, Bombay (Maharashtra).
7 Indian National Science Academy, New Delhi.
8 Indian School of Mines, Dhanbad.
9 Institute of Cultivation and Science, Poona (Maharashtra).
10 Institute of Science, Bangalore (Karnataka).
11 Mining Geological and Metallurgical Institute of India, Calcutta (West Bengal)
12 National Atlas Organisation, Calcutta (West Bengal).
13 National Geophysical Research Institute, Hyderabad (Andhra Pradesh).
14 National Institute of Oceanography, Goa.
15 National Metallurgical Laboratory, Jamshedpur (Bihar).
16 Wadia Institute of Himalayan Geology, Dehra Dun (U P).

ANNEXURE—F

Research Group related to Geoscience

Unesco : Field Science Office for Southern Asia, Unesco House, *No. 19* Lodhi Estate, New Delhi-3.

ANNEXURE G

Some important Government Departments related to Geoscience

1 Geodetic and Geophysical Survey, Geodetic and Research Branch, Survey of India, Dehra Dun.

2 Geological Survey of India, Calcutta.
3 Indian Bureau of Mines, Nagpur.
4 Indian Meteorological Department, Delhi.
5 Oil & Natural Gas Commission, Dehra Dun.
6 Survey of India, Map record and issue office, Hathibrakala, Dehra Dun.
7 Central Ground Water Board, Faridabad.
8 Atomic Minerals Division, Hyderabad.
9 Mineral Exploration Corporation, Nagpur.
10 National Remote Sensing Agency, Hyderabad.
11 Centre for Resorces Engineering, Bombay.
12 Directorate of Geology of different states.

"ANNEXURE—H"

GEOLOGICAL SURVEY OF INDIA

Director General

- Dy D G (Coal Wing) Calcutta
  - Circle Offices:
  - Coal Division-I (Calcutta)
  - Coal Division-II (Calcutta)
  - Coal Division-III (Calcutta)
  - Coal Division-IV (Calcutta)
- Dy D G Central Headquarters, Calcutta
  - Dy D G (Western Region) Jaipur
    - Circle Offices,
    - Rajasthan-I (Jaipur)
    - Rajasthan-II (Jaipur)
    - Rajasthan-III (Jaipur)
    - Rajasthan-IV (Jaipur)
    - Gujarat (Ahmedabad)
  - Dy D G (Northern Region) Lucknow
    - Circle Offices
    - Uttar Pradesh (Lucknow)
    - Jammu (Jammu)
    - Kashmir (Srinagar)
    - Himachal Pradesh (Chandigarh)
    - Punjab & Haryana (Chandigarh)
  - Dy D G (Central Region (Nagpur)
    - Circle Office
    - Madhya Pradesh-I (Bhopal)
    - Madhya Pradesh-II (Jabalpur)
    - Maharashtra (West) Poona
    - Maharasthra (East) Nagpur
- Dy. D G (BMSE Wing) Bangalore
  - Dy D G (Southern Region) Hyderabad
    - Circle Offices :
    - Kerala (Trivandrum)
    - Karnataka (South) Bangalore
    - Karnataka (North) Bangalore
    - Andhra Pradesh (South) Hyderabad
    - Andhra Pradesh (North) Hyderabad
  - Dy. D G (North Eastern Region) Shillong
    - Circle Office :
    - Assam-Meghalaya (Shillong)
    - Tripura-Mizoram (Agartala)
    - Manipur-Nagaland (Dimapur)
    - Arunachal Pradesh (Tezpur)
  - Dy. D G (Eastern Region) Calcutta
    - Circle Offices :
    - Bihar (East) Patna
    - Bihar (West) Patna
    - Orissa (North) (Bhubaneswar)
    - Orissa (South) Bhubaneswar
    - West Bengal (Calcutta)

NATIONAL INFORMATION SYSTEM IN ECONOMICS IN INDIA : A PROPOSAL

K K TANEJA
SARITA JAIN

1 NEED

Information is considered as a vital national resource for the nation's development. It is as fundamental as energy or matter. The importance of information in national welfare is very great and can no longer be doubted. However, it is extremely difficult to quantify this contribution. It is equally difficult to lay down optimum level of resources which should be devoted to the information input either at local or national level.

Unfortunately, at present there exists a wide gap between the quantum of information generated and its use. Some of the reasons for this gap are :

(i) the knowledge is growing at very rapid rate and in some disciplines the growth is exponential;
(ii) rapid fragmentation of the established disciplines into new subfields which is usually termed as 'Balkanization of knowlede';
(iii) increasing cost of material and services; and
(iv) tremendous increase in the users population.

Thus, these factors necessitate an urgent need as well as a challange to find ways and means to provide access to information resources, through properly planned and developed channels of information communication. Therefore, there is a need for creation of an informotion system having network of information centres. Establishing a national information system helps to increase the flow of information available for the users both from within the country and from abroad. It also helps in rationalization and systematization of country's research & development efforts.

2 GROWTH OF LITERATURE IN ECONOMICS

Economics is a young and a developing discipline as compared to many other disciplines in social sciences and natural sciences. The discipline, however, has been advancing at a very fast rate. This development can be measured in terms of growth in the research activity and consequent increase in the number of books and journals. During the last four decades or so there has been a remarkable use and expansion of quantitative methods of economic analysis that have produced several new disciplines (which have either been created or adapted by economists) : econometrics, programing theory, Operational research, etc. There has been more of specialization, quantification, application of statistical methods and greater use of the refined techniques of analysis.

2.1 Growth of Periodical Literature

2.1.1 *Intcrnational*

Sanford P Berg examined the trend of growth of journals in economics and found the following pattern of growth :

Table 1 : Doubling period of Economics Journals

S No	*Year*	*Number of Journals*	*Doubling Time*
1	1935	10	—
2	1951	20	16
3	1965	40	14
4	1974	80	9

The above table when examined from the viewpoint of doubling factor reveals that it took 16 years to move from 10 to 20 Journals during 1935-50; 14 years from 20 to 40 and only 8 years to attain the number 80. Berg concluded on the basis of this study, that there would be 160 important international journals of interest to Economists by 1980. However as ascertained from the '*Ulrich International Periodicals directory*', the trend of growth of periodical literature in Economics can be viewed from the table given below :

Table 2 : Growth of Periodicals in Economics as Percentage of Total

S No	*Year*	*Total No. of Periodicals listed*	*No. of periodicals in Economics*	%
1	1971-72	50,000	762	1.3%
2	1975-76	57,000	1,004	2%
3.	1981	63,000	3,280	5.2%

Source : Ulrich International periodicals directory

2.1.2 *Indian*

In India, the economics literature has been growing in volume and content. Many specialized journals pertaining to many new specialized areas such as economic geography, econometrics, industrial relations, management, planning and development, etc. are being brought out by various research institutions/ organizations.

The following table reveals the trend of growth of Indian periodical literature in economics.

Table 3 : Trend in Growth of Indian Periodicals in Economics

S No	*Year*	*No of Periodicals in Economics*	*Source*
1	1969	29	Indian periodicals : An annotated guide. Comp. & Ed. by Gidwani & Navlani
2	1978	72	,,

While looking into the content of information being published it has been found that the emphasis has now shifted from theoretical and descriptive economics to applied economics. Besides change from descriptive to applied economics the studies published as papers in journals have been more intensive and more pages are being devoted to such studies. An interesting phenomena has been that there has not been simultaneous increase in the number of articles with increase in number of journals.

2.2 Trends in Growth of Book Production

2.2.1 *International*

It would be interesting to note that 'International Bibliography of Social Sciences' : Economics, prepared by ICSSD (International Committee for Social Science Documentation) reveals that there has not been a consistent growth in economics publications between 1970 to 1978. In fact, it declined considerably during the year 1972, 1973 and 1978.

Table 4 : Book Production : A Trend

S No	*Year*	*No of publications*	*% of increase*
1	1970	7,157	—
2	1971	7,928	9.8%
3	1972	6,968	—
4	1973	6,643	—
5	1974	7,728	9.3%
6	1975	7,557	3%
	....		
7	1978	7,046	—

2.2.2 *Indian*

In Indla, the trend of Book production can be judged from the entries in *Indian Books in Print.* The following table reveals the trends of books in Economics published and in print in the English language. There has been a considerable increase in the book production.

Table 5 : Number of Books Published in India in Economics During 1967-81

S No	*Year*	*No of Publications*	(*Published & in Print*)
1	1967	1,478	(published and in print during 1955-67)
2	1972	3,668	(published and in print during 1955-71)
3	1979	4,456	(published and in print during 1955-77)
4	1981	4,316	(published and in print upto 1980)

The decline in the number of books in the edition of 1981 shows that a large number of books have become out of print.

However according to the data ascertained from ICSSR, 142 books have been published during the year 1980 and 1981.

Keeping in view the trend of growth in Economics literature the need for making information available to the users becomes more urgent. Therefore, a well planned information network is desirable.

3 OBJECTIVES OF THE SYSTEM

The national information system should aim at to provide access to information on national economic literature produced in India and on India. Primarily it can be viewed as an effort to create a resource pool to which each participating library would contribute and from which each could draw according to its needs. In order to achieve this aim the information system will have to develop an adequate document collection base and data base; to ensure quick dissemination of information through various specialized services; to achieve resource sharing through network co-operation with other national, international information systems and adequate manpower for information handing in the system work.

4 USERS OF THE SYSTEM

The proposed information system is planned to cater to the needs of the specialists who are directly or indirectly concerned with economics as a subject or as an activity. Such users have rightly been termed in the DEVSIS Report as 'economic community'. They comprise of the : Planners, Policy makers with respect to economic development at government/non-government levels specialists and Economists engaged in the implementation/execution of plans and policies; researchers engaged in Economics Social Science Research; teachers engaged in teaching of economics; financial institutions, industrial institutions and industries; communicators who attempt to convey the information about development policies, plans, programmes and projects.

5 ORGANISATIONAL STRUCTURE

The proposed National Information System for Economics in India has to be conceived as a network of existing information centres in India having adequate resources and providing services of varying nature together with new services, so coordinated as to enhance the activities of individual units. Thus, enabling its users to receive relevant and pertinent informatian according to their needs.

India being a vast country, the documents resources are scattered in different regions all over the country. Some of centres have specialised collection in certain aspects of subjects. It would, therefore, be essential to discuss briefly network structures and the advantages/disadvantages which accrue from such a networking.

Mainly two types of network structures have been identified by different authorities. They are :

Totally decentralised network has been described as 'equally distributed network' by Kent and 'Non directed network' by Atherton. It is the simplest form of network as each node communicates directly with all other nodes via bidirectional links. There is no special node which is responsible for directing the communications. Here for 'N' terminals or nodes the total number of links needed is $N(N-1)/2$.

In totally centralized network one participant node holds substantially all the resources, to be utilised by other participants. It takes only two links from any terminal to reach any other terminal, where each link is connected to any other at the central terminal as node. This type corresponds to the 'Star Network' described by kent or the directed network by Atherton. The number of links needed in this type of network is (N-I), where N is the number of terminals.

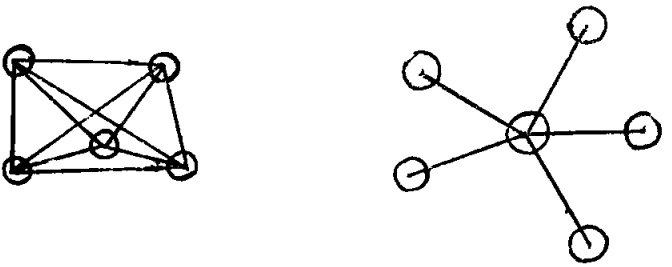


Figure 1

6 PROPOSED NETWORK STRUCTURE

In view of the advantages explained earlier the 'centralised network' structure should be preferred for National Information System for Economics in India. The Indian Council of Social Science Research (ICSSR) should play the role of national centre and Social Science Documentation Centre (SSDC) will be specialised centre for processing and diseminating information. It will be desirable to collect information at the regional level and for that purpose the country is being devided into four regions.

A survey was conducted to evaluate and analyse the collection of libraries/information centres serving the interest of economists. A questionnaire (Appendix I)

was distributed to 25 such institutions out of which 10 institutions have responded. The selection of the regional centres of proposed National Information System has primarily been done keeping inview the availability of the resources and the services rendered as revealed from the questionnaire circulated to the institutions and through secondary sources. The proposed regional centres are as follows :

Northern Region—Institute of Economic Growth, Delhi-7.
Southern Region—Institution of Social and Economic Change, Bangalore.
Eastern Region—A N Sinha Institute of Social Studies, Patna
Western Region—Gokhale Institue of Politics and Economics, Pune.

Each regional centre will operate in its own special way due to differences caused by geography, population size and distribution, manpower ratio, etc. These will be the terminals of system and will be responsible for planning of a coordinated system within the region for provision of library services and will provide backup for educational activities and supplying expertise in support of resource libraries.

Thus, the hierarchical arrangement of information centres and participant centres in information system will be as shown in fig. below :

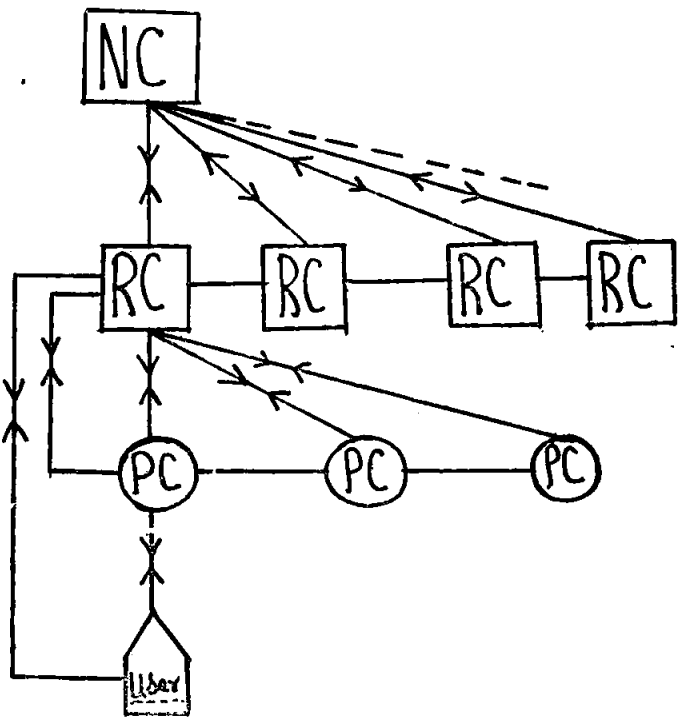


Figure 2

7 RESPONSIBILITIES, FUNCTIONS AND SERVICES

7.1 National Centre

The national centres may be charged with the following :

(i) Formulation of policy and plans of action and establishing mechanism for implementing the same.
(ii) Creation of communication links between different libraries by (post, by telephone, by telex or by other means) keeping in view the limitations of developing country.
(iii) Organisation and co-ordination of existing material and exchange of serial, holding lists, union lists and recent acquisition lists.
(iv) Formulation of criteria, guide-lines and standards.
(v) Allocating finance for various programmes.
(vi) Survey of users' need and resources to access the type, form and quantum of information required by the users; to ascertain if the needs are being adequately satisfied by the existing resources. And to identify gaps in the existing pattern of communication of information.
(vii) Developing collective retrievel tools such as union catalogue of periodicals including holdings, subject bibliographies; union catalogue of foreign book acquisition: bibliographies of unique work and non-print material (films, videotapes, gramophone records etc.)

7.2 Regional Participating Centre

(i) Establishing, maintaining, updating and publishing of regional catalogues.
(ii) Organising the mobilization of information sources for feeding the information requirements of the region.
(iii) Reference service including referral service (where information is not directly furnished but the appropriate sources are referred to); document delivery service; reader guidance, etc.
(iv) Providing bibliographical services including current title service; current awareness service; selected dissemination of information and newspaper clipping service, etc,
(v) Information analysis condensations including, abstracting service; data review service; numerical data bank providing statistical data.
(vi) Other supporting services like translation service, reprographic service and trend analysis service.

8 CONCLUSION

The rapid growth of current economic literature and a wide gap between the information generated and its use necessitate a sound information system at national level.

A centralized network structure where each participating centre would contribute and from which each would draw according to its needs in order to serve the needs of the economists has been suggested. This would cater to and accelerate the resarch in the field of economics and its allied areas.

9 ISSUES FOR DISCUSSION

1 There is a need for an information system in economics which should have a centralised network structue.

2 The SSDC (ICSSR) should act as the apex body in the centralized structural system.

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NATIONAL INFORMATION SYSTEM IN SOCIAL SCIENCE IN INDIA : A REVIEW

S P AGRAWAL

1 BACKGROUND

India has information systems, services and facilities already in existence at different levels, including social sciences. In order to harness the world's specialized and professional knowledge properly and to guide social evolution, it is necessary to work towards a general plan to create missing links to join the principal information agencies located all over the country.

The government too should appreciate the need for integrating the components of information infra-structure in the overall developmental plans. Since the concept of the National Information System for Social Sciences (NISSS) will have to count on the support of the government, the later should provide the necessary encouragement and incentive.

A National Information System for Science and Technology (NISSAT) has already been set up, while medical (HELLIS), agricultural and industrial information systems are taking shape. Small Enterprise National Documentation Centre (SENDOC) and Small Industry Extension Training Institute (SIET), Hyderabad, are also engaged usefully in appropriate technology documentation. Another centre is being developed to handle data needed by the country's planners and other government agencies.

It appears that efforts towards building a similar system in social sciences are lacking in urgency. India is in a position to set up an information grid for social sciences without further delay through coordination of the present information activities, articulation of the various services and encouraging private and public initiatives.

To pinpoint the present status of some kind of a national information system in social sciences, it is necessary to elaborate the present information activities.

Significant documentation/information services are currently being provided by various social science institutions/libraries in India.

A. NISSS is eminently suitable for several spheres of national activities, including planning. Reliable and timely information for decision-making becomes increasingly important for India, where a concept of social welfare has developed over the last three decades. Many large-scale private organizations have successfully developed their own business information systems to plan, monitor or control their activities, and these have yielded increased profits. The government should surely benefit from these methods. Apart from suggesting suitable solutions to the problems in planning, monitoring, allocation, control and co-ordination of the departmental programmes, one has to consider the special distribution of these programmes.

2 PLANNING

Planning information systems and services involves, at the minimum, several major activities, identifying or predicting the uses to which the information will be put, and designing systems that can meet the requirements identified. A planning information system can be defined as an organized flow of information from sources to users. Information systems are built for two general reasons: (i) to help decision-making, and (ii) to help research. Decision making focuses on choosing optimum courses of action, research in contrast, attempts to find new insights into natural and man-made processes.

It is clear that effective approaches for planning require proper information. While information is collected by various agencies, it is in a form which can be used only after extensive manipulation. Such operations result in considerable loss of time, and thus slow down planning processes at all levels of decision making. The NISSS can play a vital role in implementing the multi-level planning process that had been envisaged in the first five year plan.

3 DATA COLLECTION

The volume of data collected by various organizations under the government and in the private sector in our country are unbelievable. Many of the government departments prepare various statistics which are generally sent at a higher level for collection and processing. It is unfortunate that despite these, many research reports, including government reports, mention that due to severe data limitation they had to resort to primary data collection.

Obviously, there are various reasons for this state of affairs:

(i) Improper and inadequate facilities for the dissemination of information needed for the conduct of research, dissemination of results of research, utiliza-

tion and application of such research, and problems encountered during the process which generate further research.

(ii) Delay in recognition of social science research as an essential input in the social transformation of Indian society and as a tool for formulation of policies by the government. In this regard, the natural sciences have always stolen a march over other disciplines. In the sphere of natural sciences, the scientific policy resolution of 1958 of the Government of India was of great help, but no such social science policy resolution was formutated till the developments leading to the setting up of the ICSSR. It was then that a draft policy resolution was published in January, 1971.

(ii) There is a great imbalance in funds allocated for natural sciences and the social sciences. It has been estimated by J L Sardana that the country is spending annually about Rs 2,500 million on research and development in the natural, technological and medical sciences and around Rs 25 million on research in social sciences;

(iv) Establishment of an apex autonomous organisation like the Council of Scientific and Industrial Research (CSIR), which could assist research in different disciplines of social sciences, promote interdisciplinary research with a bearing on significant national problems, provide the essential statistical, documentary, and clearing house services to social scientists, identify and encourage talent for social science research and bring them together on a common platform of mutual interest.

The programme of establishment of a strong data library and documentation service centres, preparation of union catalogues, well-documented social science abstracts are of utmost importance, and that this should be given the highest priority. A centre like this should function as a clearing house of information with regard to social science research, and similar centres should also be established on a regional basis.

4 BIBLIOGRAPHICAL CONTROL

With a rapid increase in social science literature, it is necessary that there should be a thorough bibliographical control. A comprehensive control would mean that all types of materials should be given proper attention, and we may thus have a varied range of services, e.g., bibliography of books, monographs, government publications, dissertations, statistical data and index to periodicals.

Bibliographical services should work along the lines suggested by UNESCO, with due emphasis on bibliographical control of social sciences in India. The bibliographical control can be retrospective, current, retrospective-cum-current, and bibliographical control over bibliographies. Efforts were made as early as 1855 to bring out the catalogue of the Calcutta Public Library.

SSDC has also put in great efforts in fulfilling the need for a comprehensive retrospective bibliographical control. A big venture at ICSSR is the *Indian Education Index*, a unique documented compilation of the complete contents of 26 leading educational journals of the country. This has been sponsored by the Indian Institute of Education, Pune, and has been documented with the help of ICSSR-SSDC. The compilation contains about 40,000 entries acccrding to subjects and authors in about 1,200 pages. On current bibliographical control, there is the Indian National Bibliography, brought out monthly by the Central Reference Library at Calcutta. There are also such book trade catalogues as *Indian Publishers and Booksellers*; *Indian Book Reporter*; *Indian Books*; *Recent Indian Books, A Quarterly Catalogue of Indian publications*, *Indian Book Industry*, and *Accession Lists*. Wide-ranging abstracting services are provided by ICSSR. The SSDC also plans to start '*Bibliographies of the Month*' and '*Current Contents*'.

In the retrospective-cum-current category may be mentioned the SSDC volumes, 32 in number, of the *Union catalogue*; *Union list of Serials and Periodicals*, supplemented by the *Union list of Periodicals* currently received in Delhi libraries, which is updated every alternate year. In the series of Union list, volume of Andhra Pradesh, Bombay and Karnataka have also been brought out. The Union catalogue project has covered 535 libraries in 17 states of India, with a total holding of 31,125 titles of importance to researchers in social sciences. There are also individual library catalogues for social sciences, viz, Catalogue of holdings of periodicals in social sciences in the JNU library, 1980; Catalogue of Periodicals, Mysore University Library, 1970; Catalogue of theses and dissertations available in the Rajasthan University Library, 1966; Theses in SSDC : a bibliography (1979), Research Projects in SSDC : a bibliography, (1981). The wide spectrum of SSDC activities will be discussed again in the subsequent sections.

4.1 Other Bibliographies

The Bibliography of bibliographies include: A bibliography of bibliographies in India by D R Kalia and M K Jain (1975); Indiana by B Sengupta (1966); Indian reference sources by H D Sharma (1972).

5 ROLE OF ICSSR

Soon after its establishment, the ICSSR set up a number of committees such as administrative committee, research projects committee, research survey committee and committee on documentation services and research information (CDSRI) C.D.S. and R.I. consists of the council chairman, members of the

Council, information scientists/social scientists and Director, Social Science Documentation Centre as members of the Council.

The committee also appointed a working group to report on documentation services. The major recommendations of the working group are : (i) that the ICSSR should coordinate and support, where needed, the documentation activities which have already been initiated in several institutions; and (ii) that the council should compile a union catalogue of social science serials in important libraries in India on a top priority basis.

6 SSDC ACTIVITIES

The National Social Science Documentation Centre undertook the following activities :

(i) acquisition of material to build up a collection of basic reference materials, microfilm and microfische materials;
(ii) to collect all doctoral theses in social sciences approved byIndian universities from 1970 onwards;
(iii) to establish a data library and a reprographic unit;
(iv) to prepare a union catalogue of social science serials;
(v) to set up repository library in respect of old volumes of social science serials;
(vi) to set up regional centres for social science documentation;
(vii) to assist institutions or centres for provision of bibliographical and documentation services;
(viii) to develop a repository library in order to save and salvage important research material which other libraries cannot hold.

6.1 SSDC Projects

A beginning was made in the SSDC with two broad categories of programmes : (i) Projects undertaken by the Council directly or in collaboration with selected institutions, and (ii) Projects assisted by the Council with its grant-in-aid scheme. Additionally an Interlibrary Resources Centre was set up for the purpose of resource sharing.

A brief description of projects in both categories is given below in the subsequent sections.

6.1.1 *Union Catalogue Project*

6.1.11 *Union Catalogue of Social Science Serials* : The compilation of union catalogues was the first project undertaken on 1 April 1970 and formally completed on 31 March 1976 by the Social Science Documentation Centre, the documentation division of the ICSSR.

The ICSSR has specified the social sciences for the purpose of research supported by it. In the union catalogue, however, it was decided to widen the scope of interest and not to limit it to ICSSR specified disciplines. And as such, the disciplines included were : anthropology, commerce, demography, economics, education, geography, history, international affairs, journalism, law, library science, management, political science, psychology, public administration, sociology, statistics, and town and country planning.

A union catalogue is primarily a reference tool to helplocate availability of known items of the category of materials covered by it. In this case, the idea was to render help to scholars in their search for relevant social sciencer esearch material. It also helped concerned libraries to share their resources with one another for the benefit of their clientele.

The union catalogue is not an inventory of all the libraries in India. Selection was necessary. Firstly, it seemed proper to select such libraries which are known to have large holdings of serials in social sciences. Secondly, it was decided to include a minimum of such libraries in each state or city as this would provide reasonably easy access to any researcher in that area. Such libraries were indentified in consultation with a senior librarian in the region.

The huge task of creating a union catalogue could not obviously be accomplished by a staff sitting in Delhi, it required the involvement and active cooperation of the libraries and their staff in difierent states of India. A scheme was, therefore, formulated which provided for the appointment of Project Directors in every state to collect the data from the libraries in their respective state. Necessary facilities were provided and a programme was devised to record and present the holdings and individual serial titles in a uniform and standardized pattern.

"Serials" is a comprehensive term. It connotes any periodical publication of any frequency published by any agency. Ordinarily, it includes periodicals, annuals (reports, year books, etc.), journals, memoirs, and proceedings and transactions of societies, conferences, congresses and legislative bodies. Most government publications and those of international organizations are serials.

Of the 21 Indian states (Sikkim was not then a constituent state) and nine union territories, 17 states and two union territories were covered by the project. Four states (Manipur, Meghalaya, Nagaland and Tripura) and seven union territories (Andaman and Nicobar, Arunachal Pradesh, Dadra and Nagar Haveli, Goa, Daman and Diu, Lakshadweep, Mizoram, and Pondicherry) were excluded because the library situation in these areas had not yet developed in terms of resources for social science research. In any subsequent updating project, some of these areas will have to be covered.

The union catalogue, by its very nature, requires revision from time to time to provide information about the current status of serials in our libraries. For, both weeding out certain serials as well as enlargement in the holdings take

place. Unique holdings of some title may also be discovered in presently lesser known libraries. The revision of the union catalogue is not only desirable but imperative considering the growth in libraries and its usefulness as a tool for scholars for locating materials expeditiously.

It is, therefore, being considered to take up this work on a regular basis and make it a core activity and a continuing programme of the SSDC.

This compilation of union catalogues of serials excluded newspapers. Separately, a preliminary edition of Uuion Catalogue of Newspapers reflecting holding in Delhi libraries as on 15 September 1978 was brought out in mimeographed form and distributed to local libraries for reference. It is being updated and the information is intended to be maintained on cards.

A Directory of Social Science Research Institutions and Directory of Professional Organizations in India were also compiled and published in 1971. These have been updated and the information is available on cards for reference.

6.1.2 *Bibliographies Project*

6.1.12 *Indian Economic Bibliography* : The second major project on documentation undertaken by the ICSSR was the compilation of an annotated bibliography on the Economic History of India, 1500-1947. While the ICSSR provided the entire financial support, the actual work including recruitment and training of staff, was taken up by the Gokhale Institute of Politics and Economics, Pune.

In this bibliography, efforts have been made to cover all the materials in the English language. All entries have been briefly but critically annotated. Statistical data wherever available, are described in detail. Location of the materials consulted and their physical condition have also been mentioned.

The Project, was started on 1 April 1971, and completed in 1979. There is a wealth of information and statistics available in official publications, travelogues, treatises, periodical articles, pamphlets, dissertations, archives, and official records. Sometimes, it lies hidden. Hence, the need for careful anotation.

6.2 Retrospective Index

With the experience of preparing the union catalogue, the SSDC has planned to prepare a retrospective cumulative index of Indian social science periodicals right from their respective first volume. The Retrospective Index Project was started on 1 April 1976.

Even though these periodicals are a valuable source of raw material for researchers, the treasure trove very often remains untapped for want of a proper tool.

There are a number of well known foreign indexing publications. These, however, do not scan Indian jourals to an adequate degree. The indigenous efforts,

few and far between, have shown a marked improvement during this decade as for as coverage and regularity are concerned.

SSDC indentified 240 periodicals of import for the project, and decided on 1970 as the cut-off year. When the project is completed by the mid 80s, it will offer bibliographical control of periodicals literature published over the past hundred years or so which have potential utility to social scientists.

For the sake of convenience and utility, the period covered is divided into three segments : (i) 1947-70, (ii) 1920-47; and (iii) pre-1920. The work is planned ordinarily to be taken up in the order indicated above. So for most of the journals in education, political science, psychology, sociology and social anthropology, have been indexed.

The index is planned to be maintained initially on cards which can be consulted by scholars even while the work is in progress.

The initial experience of bringing out a volume of "Indian Education Index" under this series has received wide appreciation. It is, therefore planned to make this a longterm continuing service and bring out a series of volumes.

When completed, the Retrospective Cumulative Index will have the following advantages:

(i) the index will provide reasonable bibliographic control of periodical literature published in this country during approximately the last 150 years;
(ii) the union catalogue volumes will give the locations in the country of the needed volumes of any periodical for quick and easy access; and
(iii) Interlibrary Resources Centre will try to provide access to these volumes or supply copies of required articles at reasonable cost.

6.3 Mahatma Gandhi Bibliography

The National Committee for Gandhi Centenary in India initiated a project in April 1968 of compiling an exhaustive and authoritative bibliography of all writings on Gandhiji at the National Library, Calcutta. The scope was limited to monographs on Gandhiji published before 2 October 1970, the closing date of the Centenary Year.

With the winding up of the National Committee, the Union Ministry of Education entrusted the responsibility of completing the project to the ICSSR.

The Council decided to enlarge the scope of the work to incorporate all Indian languages, to include monographs published till 31 December 1972 and to bring out biennial supplements to keep the basic volumes updated.

Most of the monographs, which are wholly and directly on Gandhiji, are in the English language. The first volume in the series, 'Mohandas Karamchand Gandhi : A Bibliography', was therefore devoted to monographs in English.

The volume included 800 titles, among which 79 represented theses on Gandhiji accepted by Indian and foreign universities. This was followed by volumes in Hindi and Urdu. Sanskrit volume is in the press. The manuscript of Bengali fascicule is also ready to be released for printing. The remaining volumes are at various stages of compilation.

These ICSSR sponsored definitive bibliographies have main entries followed by suitable indexes that make the task of an interested researcher wading through Gandhiana very easy. One other distinctive feature is that the location is given in each case of one or more libraries holding the item. The volume of monographs in English also provides : (i) listing of contents which make each monograph an open book as it were; and (ii) information on reviews of the monographs, wherever possible.

The Council now assists Gandhi Peace Foudation, New Delhi, to bring out biennial volumes covering publications in all languages.

6.4 Area Studies Bibliographies

Started during 1979 the project on Area Studies Bibliographies is aimed at bringing together all social science materials of research value pertaining to the different states and union territories. Under this project it is envisaged to bring out a series of bibliographies which will cover materials in social sciences available in any form and language exclusively related to the area concerned.

It will cover all available materials to date. The first phase will cover materials in Indian languages. The second phase will cover materials in English and other foreign languages. All research material-both published and unpublished—will be included in the bibliography.

Under the supervission of a Project Director in each state the compilation work is in progress in the following regions; viz., Andhra Pradesh, Bihar, Delhi, Gujarat, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Punjab, Rajasthan, Tamil Nadu and Uttar Pradesh.

6.5 Language Bibliographies

This project is wider in scope and seeks to cover research material in all disciplines in social sciences in Indian regional languages. The compilation work of bibliographies in Gujarati (at Gujarat Vidyapeeth) and Hindi (at Nagri Pracharini Sabha) is in progress.

The second category of programmes assisted by the ICSSR with grants-in-aid relates to compilation of indexes and bibliographies.

6.6 Index of Articles on Agricultural Economics

The Indian Society of Agricultural Economics has prepared an index of

articles on agricultural economics from foreign as well as Indian magazines. The period covered is 1950-70. The index is computer-produced. Low-priced sets of index cards are available to institutions in India.

6.7 Asian Social Science Bibliography

The Institute of Economic Growth, Delhi, started the Southern Asian Social Science Bibliography in 1952 with assistance from UNESCO. When UNESCO aid was discontinued in 1969, the ICSSR stepped in and the publication has since been continued as the Asian Social Science Bibliography. Each annual volume includes about 2,000 entries drawn from over 200 journals in the social sciences.

6.8 Documentation on Asia

A similar case was that of Documentation on Asia which was compiled annually by the Indian Council of World Affairs until 1961. With ICSSR's monetary support, the series will be brought up further.

6.9 A Directory of Behavioural Science Research in India

The first volume of the directory was published in 1966. It covered research done and published in India during 1925 and 1965. Funds were provided for the second volume pertaining to the period 1966 to 1968. This was compiled by Dr. Udai Pareek, it has 6,268 entries under 22 headings. Post 1968 research is covered in the ICSSR journal, and Indian Psychological Abstracts.

A companion volume by the same author is An Index to Behavioural Science Abroad. This volume contains 1,598 entries and includes a bibliographical directory of 165 foreign authors.

6,10 doctorates in Social Science

The ICSSR published a comprehensive volume of doctorates awarded by Indian universities up to 1967, and brought out yearly additions till 1971. Financial assistance is now provided to the Association of Indian Universities to continue the series.

6.11 Marathi Periodicals Index

Assistance was offered to Date Soochi Mandal, which continues the work of a distinguished Marathi bibliographer, the late S. G. Date, in its project of compiling a completed index of articles in all Marathi periodicals from 1800 to 1950.

6.12 Kannada Periodicals Index

Grant-in-aid was provided to the University of Mysore for compilation of a retrospective index of social science articles in Kannada periodicals.

6.13 Hindi Periodicals Index

The Council is also supporting an undertaking of the Research Foundation, Delhi, for completing an index of Hindi periodicals.

6.14 Children's Periodicals Index

The ICSSR also nurtured during the International Year of the Child a proposal for an index of chidren's periodicals from the Behavioural Sciences Centre, New Delhi.

6.15 Grant-in-aid for Projects

The ICSSR has also sanctioned grant-in aid for 13 projects such as : Revision of Indian reference sources; Indian Press Index; children's literature; A bibliographical study, etc.

ICSSR has also provided a grant-in-aid of Rs. 2,00,000 to the Indian Council of World Affairs towards the maintenance of the Library during 1982-83 (including journals subscribed for ICWA).

6.16 Bulk Purchase of Publications

Another method by which the ICSSR has promoted publication of good reference work is by bulk purchase of copies. In this category are included (1) Index India, (2) Indian Behavioural sciences Abstracts, (3) Indian Press Index, (4) A Guide to Reference Material on India, (5) Thesis on the Indian Subcontinent (1877-1971), (6) Indian Political Movement (1919-71), and (7) Kesari Centenary Index, Volume-I.

6.17 Inter Library Resource Centre

In 1973, ICSSR in collaboration with Jawaharlal Nehru University launched a project, novel in this part, of the World. It was the Inter-Library Resources Centre, a depoint library at 35 Ferozshah Road where the Social Science Documentation Centre is located in New Delhi.

Under the scheme, local libraries—a dozen of them initially—deposited with this centre their non-current, infrequently used but important for research serials

(i.e., newspapers, journals government reports, etc.) The scheme is intended to serve a double purpose of making available a wealth of materials to scholars at one place and at the same time relieving the libraries from space problem to some extent. The ownership of the materials remains with them if they so choose, and no further financial outlay is required on their part. The number of participating libraries including SSDC has risen to 30.

SSDC's library collection consists of basic materials in social sciences : monographs on research methodology, bibliographical and reference tools, items bearing on ICSSR projects, publications for which grant-in-aid are provided, important journals, and unpublished research reports and theses. (If a thesis is not received gratis from the university or University Grants Commission, a copy is directly purchased from the author).

Auxiliary services provided by the ILRC are interlibrary loan by obtaining additional material needed by readers from other libraries on loan, reprography (by providing photo-copies of materials required by the scholars), and bibliographies on demand by providing short bibliographies tailored to the needs of the research scholars on a nominal charge of Rs 5 for hundred entries or part thereof.

ICSSR operates a study grants scheme for the benefit of scholars. The facility enables them to consult materials at libraeies in pursuance of their research interests.

7 NATIONAL INFORMATION SYSTEM

From what has been mentioned so far, it is apparent that there is already in existence a kind of national information system in embryo, and we have only to set it up in an organized shape. Based on the current status of the system, we may state that the National Information System in Social Sciences (NISSS) should have a focal point in the ICSSR, and a network of information centres and services outside. The focal point should be presided over by an advisory committee. It should have a number of adhoc working groups and expert units. It should also have a small secretariat, a chief executive and divisional heads for programmes, planning and policy and systems.

7.1 FUNCTIONS

The functions of the focal point should be:

1 Formulation of policy for NISSS.
2 Formulation of plan of action.
3 Establishing mechanism for implementing the policy and plans.

4 Allocating funds for various programmes.
5 Coordination of activities with national and international organizations
6 Formulation of criteria, guidelines and standards.
7 Promoting and supporting research and development.
8 Promoting education and training programmes in information field and user education.
9 Monitoring and evaluation of the performance of the system.
10 Act as a point of interaction with world information services, systems and programmes.

7.2 Structure

The NISSs network should include national centres of information, regional centres of information, sectoral systems, and other specialized services. The existing information resources and facilities should be fully utilized and, if necessary, the existing centres should be upgraded. To elaborate the point further, the national centres should conduct, organize and provide information at the national level in an overall manner in the field of social sciences. They are mission-oriented information centres, and would take care of mostly residual services not covered by the sectoral system. The following centres should comprise the national centres of information in the field of social sciences :

1 Social Science Documentation Centre (existing)—SSDC.
2 National Social Science Library (proposed)—NSSL
3 Social Science Data Archives (existing)—ICSSR Data Archives.

As already referred to, SSDC, established in 1969, has undertaken several major projects either directly or in collaboration with some selected institutions. It also helps many projects under the grants-in-aid scheme. If the NISSS comes into existence, the activities of SSDC would multiply several times.

NSSL will be developed initially by SSDC as an institutional project, to become a separate institution later on. Based on the comparative acquisition concept, it will avoid duplicating material already available in the country. It will augement the national collection through filling up the gaps. It will assess the information resources already available in the country and indentify the gaps to be filled up. The objective would be to ensure that NSSL and other service libraries in social sciences will together have at least one copy of everything worthwhile being published throughout the world in the sphere of social sciences.

The ICSSR has already set up regional centres in Bombay, Hyderabad, Calcutta, New Delhi, Shillong and Chandigarh. They build up a basic reference collection in social science not available at the universities with which they are

associated. The centres will be funded and administered directly under the proposed NISSS scheme.

The sectoral system, which will be a vital link in NISS, will be developed from the most suitable research institution in the discipline concerned. The sectoral centres will provide specialized services with a good amount of subject competence, and will be looked after by subject specialists trained in information work. The sectoral system, comprising the leading centre chosen for the purpose along with other information centres, will constitute a grid of its own, and will take care of development of information resources and services.

The sectoral systems will be developed in major areas of national relevance and priority. These areas could be enumerated as rural development, manpower planning, urbanization fiscal policy studies, development studies, agricultural economics, population studies, international relations, economic planning and development, public administration, foreign trade, and educational resources including non-formal education. The list could be suitably changed from time to time.

It is necessary that a survey of information users and needs and available resources be made at national, regional, sectoral and institutional levels so that the functioning of the NISSS is made more meaningful. There should also be a policy to coordinate the acquisition of documents and their distribution among different libraries. This should help prevention of unnecessary stock or undue duplication of material in libraries, and so the available book purchase fund of the country will be properly utilized to acquire the maximum number of titles. The acquisition policies of each institution will have to be clearly defined and coordinated at the sectoral, regional and national levels. Coordination will have to be extended to every conceivable sphere, including subscription to periodicals and serials.

The development of information resources would automatically imply a programme of decentralization. Most of the important material will be available in the institutional libraries, that is, in the actual place of use. The sectoral centre will supplement the acquisition of individual institutions coming under its purview to ensure that an exhaustive collection is available in the area or the sector. The regional centres will maintain a general reference library, collect and hold theses and dissertations prepared in the region, maintain a depository of publications of regional languages and act as a dormitory for housing older material infrequently used but important for research, which is required to be removed by service libraries to accommodate more recent materials. The NISSS would build up a national collection by complementing the local sectoral and regional collections. Many residual areas will be taken care of by the NSSL.

While building up the national collection, the aim will be to make sure that NSSL, regional centres, sectoral units and individual libraries taken together would have at least one accessible copy available within the country, no matter

where it is kept, for use by scholars at all times.

A decentralized network will necessitate the use of common techniques to process the collection in the constituent libraries. This will, again, mean that there will have to be a union catalogue for the purpose of inter-connection and to quickly locate the documents in the libraries. The union catalogue is not only considered a location tool, but helps in focussing strong and week areas in the national collection for the purpose of continuing the acquisition programme,

8 CONCLUSION

Why is there an urgency to set up a National System ? A large number of library and information centres have come up in the country during the last several decades both at the macro and micro levels. The growth, however, has been haphazard in the field of social sciences as in other spheres, Academic institutions and Government departments have all come their own ways to develop their own units, thereby wasting valuable resources in avoidable duplication. These information centres have naturally not been able to share their resources as units of a national network for certain common objectives. There is no national policy which would guide the setting up of the various institutions towards the objective of channeling information activities into a new independent condition for their further development and progress. It is my view that the Indian Council of Social Science Research is potentially the most appropriate body to become a focal point for co-ordination and cooperation for the network of information centres and services outside.

The choice, therefore, is clear : to have or not to have a National Information System in Social Sciences in India. A negative answer is like going downhill after we have acquired the necessary expertise for the job. On the contrary, the question facing us is how soon do we fall in line and streamline the available resources to achieve the objective. This will prepare India to join if necessary, a regional Social Science centre for the Asia and the Pacific Region, a proposal being debated by UNESCO.

PLANNING FOR AN AGRICULTURAL INFORMATION SYSTEM IN INDIA

S DUTTA

1 INTRODUCTION

India is primarily an agricultural country, and 80 per cent of the population lives in about 5,76,000 villages. Agriculture and allied occupations provide livelihood to about three-fourths of the population and contribute nearly one half of the national income. The two outstanding features of agricultural production are the wide variety of crops and the preponderance of food over non-food crops. India is the fourth-largest grain producer in the world and has one of the largest potentials of any nation for future increases in grain production. The food grains production in India has more than doubled during the last 30 years. In 1950 the food grain production was about 50 million tonnes, but in 1981-82 it reached 134 million tonnes. India's agricultural production has been growing at the rate of 30% per annum.

2 AGRICULTURAL RESEARCH

It was in the beginning of this century that the Government of India recognized the need for the establishment of a sound system of scientific investigations in connection with agriculture. The Imperial Department of Agriculture was established in Calcutta in 1881, followed by State Departments of Agriculture in Bombay, Madras, Shillong, Allahabad, and Nagpur between 1883 and 1895. However, it was in 1905, that the Government laid the foundation of organized research in India by establishing at Pusa, Bihar, the Agricultural Research Station and the Experimental Farm (later called the Imperial Institute of Agricultural Research, and after Independence (1947), the Indian Agricultural Research Institute). Subsequently, funds were provided for the develop-

ment of agricultural research and education in the provinces and a separate Department of Agriculture was constituted in most of the provinces. Agricultural colleges were also founded in Poona, Kanpur, Nagpur, Lyallpur (now in Pakistan), Coimbatore, and Sabour. The administration and co-ordination of agricultural work and governmental policy were looked after by the Government of India till 1921. However, there was no agency in the country charged with the specific purpose of co-ordinating work on agriculture and animal husbandry in different provinces and bringing them in line with the policy of the central government.

The Royal Commission on Agriculture was appointed in 1926 to examine the conditions of agriculture and rural economy in India. The Royal Commission, after discussing the possible methods by which close contact might be established between the scientific investigators working in the institutions under the central government and those employed under provincial governments, recommended the establishment of an Imperial Council of Agricultural Research, which was registered as a society on 16 July 1929. Consequent upon the advent of independence, the name of the society was changed to the "Indian Council of agricultural research" on 10 June 1947.

Until 1965, the ICAR functioned largely as an apex co-ordinating body financing selected *ad hoc* research projects mainly through revenues obtained from the Agricultural Produce Cess Act of 1940. In 1965, the Government of India entrusted to ICAR Society the responsibility of managing research institutes in agriculture, animal husbandry, and fisheries. Thus, a network of research institutes located in different parts of the country was merged with the ICAR so that problems of agricultural research could be viewed in their totality. In addition, ICAR was also entrusted with the responsibility of fostering and supporting the growth and development of agricultural universities.

ICAR, as an apex agency, is responsible for coordinating the research, education, and extension activities in the entire country. A well organized national grid of cooperative research has been operating in the country for some time now. In this system, three sets of institutions are involved, namely 31 Research Institutes and one staff college of ICAR, 5 Project Directorates, 80 All-India Coordinated Research Projects and 23 Agricultural Universities. The development of agricultural research activies in India has been admirably chronicled by M S Randhawa.[1]

While the ICAR institutes and the agricultural universities organize research on fundamental and applied aspects of production, protection, and utilization of crops, animals, and fish, the co-ordinated projects carry on research on applied aspects of practical importance. Besides these institutions, agricultural research is conducted by most of the state Departments of Agriculture, which function under the aegis of the state governments. All the traditional universities have some agricultural colleges affiliated to them and at present there are

105 agricultural colleges, 24 veterinary colleges, about 20 home science colleges, and a few colleges of agricultural engineering and food technology.

3 AGRICULTURAL DOCUMENTATION ACTIVITY IN INDIA

There are nearly 200 libraries in the field of agriculture and allied sciences in India. All the research organisations mentioned earlier have libraries, whose collections vary to a great extent. The libraries of the Indian Agricultural Research Institute, Indian Veterinary Research Institute, and the National Dairy Research Institute are known for the rich collection in their respective areas of specializations. Many of the agricultural university libraries, particularly the old ones, also have very good collection of agricultural literature. According to a 1969 estimate[2] ICAR libraries have over 6,20,000 volumes and 9,832 current serials with them. Agricultural universities in tne country have over 7,80,000 volumes and 11,392 current serials. The number at present will be considerably more.

Most of these libraries carry out routine library functions, with only rudimentary documentation functions. Many of these issue weekly list of periodicals received, monthly list of additions, some provide newspaper clippings or sort of current contents service. Most of them compile *ad hoc* bibliographies for their clients on request. The IARI library is maintaining on cards an Indian Bibliography of Agriculture since 1944. The bibliography contains more than 1,00,000 referencesand is arranged in two parts: alphabetical part by author, and subject part in classified order according to UDC. The bibliography is being kept updated through the addition of about 8,000 entries per year, selected by scanning over 700 Indian and foreign periodicals for work done by Indian scientists relating to Indian agriculture. Similarly, a file containing 40,000 references on cards was built up during 1905 to 1947 at the Mukteswar Branch of the Indian Veterinary Research Institute[3].

In 1976, an initiative was taken at the Marathwada Agricultural University, Parbhani (Maharashtra), towards the bibliographical control of Indian agro-biological literature. Bibliographical Research Cell set up at the university library in collaboration with senior scientists and library's professional staff prepared a retrospective information file from 1966 of Indian work, and published seven bibliographies on different agricultural topics horticulture (3,497 references), soil science (3,767 references), vegetable crops (4,209 references), pulses (2,357 ref.), weed science (2,414 abstracts), grapes (1,400 abstracts), and oil seeds (3,500 references). It has taken 6 years for collecting 24,747 references and 5,020 abstracts on 12 subjects of agriculture and to publish (commercially) 7 projects[4]. Although, not very comprehensive, this is a laudable attempt at bibliographical organization of Indian agro-biological literature.

Besides these attempts at bibliographical organization of Indian agricultural literature, mention may be made of the *Indian Science Abstracts* published by INSDOC since 1965. Although according to a study by Moitra and Batra[5] the coverage by *Indian Science Abstracts* is only 42.2% (a figure quoted by many subsequent librarians), it may be pointed out that the study was based on the coverage of two journals only for a single year (1971). But the significant point made in the paper was that taking the coverage in 3 important abstracting services together—the *Indian Science Abstracts*, the *Biological Abstracts*, and the CAB abstracting journals—the total came to 81.9% only. Considering the fact that the two journals selected for study, *Indian Journal of Agricultural Sciences* and the *Indian Journal of Animal Sciences* are predominantly research journals, this gap in coverage is very significant.

The ICAR has established a current research information centre by creating the Research Information Unit in 1967 to provide a central source of information on the nature, location and status of current research projects conducted in the country. In 1974, the Government of India nominated ICAR to act as the national input centre for the supply of bibliographical information to AGRIS through its Research Information Unit, The unit, designated the Agricultural Research Information Centre (ARIC), is located at the IASRI buildings, adjacent to the IARI campus.

With the setting up of the Agricultural Research Information Centre, a significant step towards the bibliographical control of Indian agricultural literature has been taken. However, the centre has yet to come up to its optimum operation. The total number of entries sent from India during 1976-1980 into the AGRIS system was 13,817. However, during 1981, inputs were of the order of 6,660, and the current tempo is about 450 entries per month. It has been estimated that there are about 650 periodicals, which cover Indian agricultural literature. Besides, there are theses and a larger number of non-conventional literature. Together, it is estimated that 10,000—12,000 items of agricultural research interest are generated every year in India. Indian input in the AGRIS system is thus barely 50% of the national output. Thesis material, which is not covered by ARIC, is covered in the *Thesis Abstracts* published by the Haryana Agricultural University since 1975. A very good survey of agricultural information activities in India has been done by Surender Mohan[6].

4 NATIONAL AGRICULTURAL INFORMATION SYSTEM

The above brief account of the agricultural documentation activities in India, clearly shows that there is no organized effort so far to coordinate, collect, collate and disseminate agricultural information in India. It may be stressed here that agricultural information does not mean research information only (for which some efforts have been made) but socio-economic data and extension literature

are equally important. In a workshop on information in Agriculture held on 7-8 August 1982, at Mohanpur, West Bengal, jointly sponsored by the Bidhan Chandra Krishi Viswavidyalaya (BCKV) and the Indian Association of Special Libraries and Information Centres (IASLIC), four distinct categories of agricultural information users were identified :

(i) Scientific community;
(ii) Extension agents;
(iii) Policy markers/Administrators/Media personnel; and
(iv) Farmers.

It was also recognized that the requirements and level of information of the above category of users are different. The workshop recommended that since it is not possible to deal with the different types of information requirements of various categories by a single organization, an agricultural information grid should be set up. Each nodal point in the grid will also serve as a referral centre for the whole grid.

The problems of agricultural documentation in India have been discussed in a number of forums. The report of the second Indo-American Library Survey Study Team (*op. cit.*) carried valuable recommendations directed toward evolving a national system of agricultural libraries and documentation centres, with the libraries of the Indian Agricultural Research Institute (IARI). The Indian Veterinary Research Institute (IVRI) and The National Dairy Research Institute (NDRI), functioning as national libraries in agriculture, veterinary, and dairy science respectively. At the "ICAR-PAU Seminar on Agricultural Librarianship and Documentation" a plea was made by Banerjee and Moitra[7] for the setting up of a National Agricultural Research Information Centre (NARIC).

However, thinking so far was that research information only constitutes agricultural information. Surendar Mohan (*op cit*) suggested an agricultural information network with the participation of three proposed national agricultural libraries namelely IARI, IVRI, and NDRI, other libraries of the ICAR, Agricultural Universities Libraries, and cooperation of libraries of the food, fertilizer and seed corporations, various commissions and surveys, libraries of CSIR complex, coffee, tea, and rubber boards, etc. This network would form one sector of the NISSAT. Banerjee[8] somewhat modified his original idea of NARIC when he proposed National Agricultural Reference and Referral Centre (NARC), which is more wide based.

The best way to set up a sound agricultural information network in India will be to develop the library/documentation centres attached to each specialized institutes under ICAR into a national information centre for that speciality. For example, every bit of agricultural information—scientific, socio-economic, or extension—concerning, say potato, should be documented at the Central

Potato Research Institute, Simla. Similarly all information concerning dairy science should be documented at the National Dairy Research Institute, Karnal. The head-quarters library of ICAR should concentrate on literature on agricultural policy and agricultural administration. The Directorate of Agricultural Economics and Statistics, New Delhi, will be the nodal centre for all socio-economic information concerning agriculture. This network of specialized information centres, will be co-ordinated by a National Agricultural Information Centre (at IARI?), whose function will be mainly referral. It will also undertake such activities, which transcends specific subject fields, such as compilation of union catalogues, functioning as national input centre for AGRIS, organizing translation service, or undertaking training activities. Each nodal point in the grid should function as an information analysis centre—compiling bibliographies, supplying photocopies on demand, bringing out state-of-the-art report, publishing newsletters, and generally attending to all types of queries, scientific, technical, and socio-economic concerning the crop. They can help each other by supplying copies of documents of interest to the centre concerned. For example, if IVRI comes across a document which it feels would be of interest to NDRI, it should pass on the information (and a copy of the document if requested) to NDRI. For this type of cooperation amongst various units within the grid, it is necessary to adopt a common citation and indexing practices. Some economy in the periodical budget can be effected, if this type of cooperation is agreed upon, since each institute can concentrate on acquiring core periodicals and depend on sister institutes for obtaining relevant information from the peripheral periodicals.

Information is an essential input in any developmental activity. Planning for a national agricultural information centre in India has been going on for a long time. It is high time that some concerete steps are taken to lay a strong agricultural information base in India.

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PLANNING FOR NATIONAL INFORMATION SYSTEM IN INDIA : MEDICAL SCIENCES

KHIN THET HTAR

0 INTRODUCTION

The concept of National Information Systems (NATIS) originated with Unesco since 1966 but it was not until 1974 that it materialized and in 1976 that guidelines for implementation of NATIS was issued. Now in the 1980s National Information Systems in countries all over the world are being developed with the aid of the General Information Programme (PGI) of Unesco. In its declaration of the concept of NATIS, Unesco has stated that "the precise form and character of the National Information System, composed of a number of subsystems, will vary in different countries, but co-ordination of all its elements must be the goal".

In this paper we will be discussing the issues and considerations regarding the health sciences information system for the country as a subsystem of NATIS.

From a systems point of view an information system may be viewed as haveing several sub-systems viz. People, Materials, Process, and Machines. The relationships between these sub-systems are shown in Fig. 1.

Issues concerning the different sub-systems will be discussed separately. In addition, issues concerning the policy as it relates with Health Sciences Information System will be raised.

1 POLICY ISSUES

1.1 INFORMATION SYSTEM FOR HEALTH SCIENCES OR MEDICAL SCIENCES

The term 'medical' generally emphasises the curative aspects of medicine whereas the term health has a wider meaning. The World Health Organization defines health as 'A state of complete physical, mental and social well-being,

and not merely the absence of disease or infirmity'. The term 'Health Sciences' would thus embrace all sciences which contribute towards the preventive, promotive, rehabilitative and curative aspects for the maintenance of health.

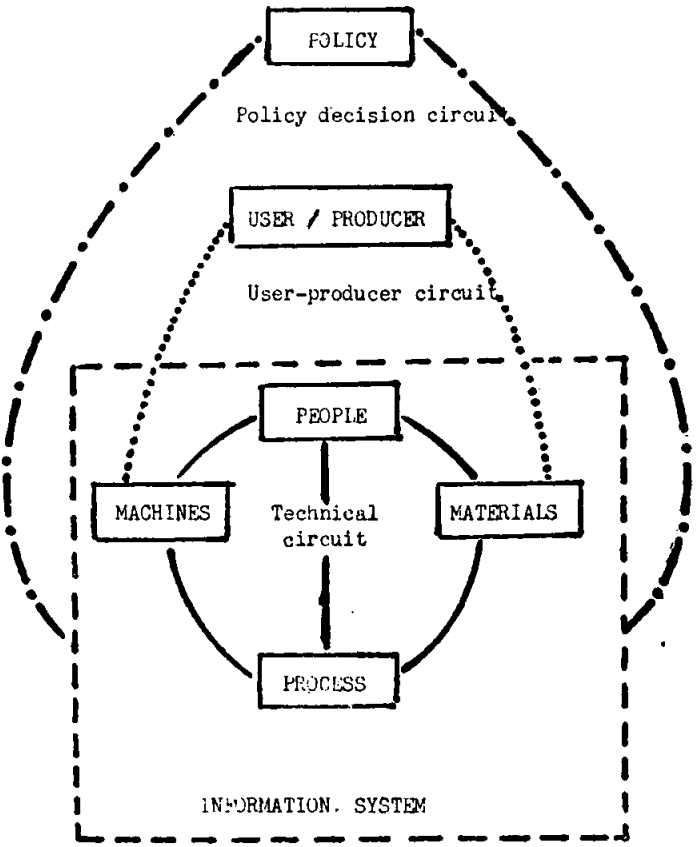


Fig. 1. Relationship between various Components of the Information System.

1.2 Concept of the National Health Sciences Information System

A National Health Sciences Information System is at present interpreted in most countries as consisting of health statistical, epidemiological and other health-related information useful for health planning and management. Health literature from a lot of other sources are not generally included in this system. Since there are two major categories of health information, might it not be more appropriate to consider it from the holistic aspect to view the National Health Information System as a sub-system of rhe national information system

(NATIS). The subsystems would be the National Health Management Information System, dealing with the statistical, epidemiological and other health-related information, and the National Health Sciences Information System dealing with health and medical sciences literature. (Fig. 2)

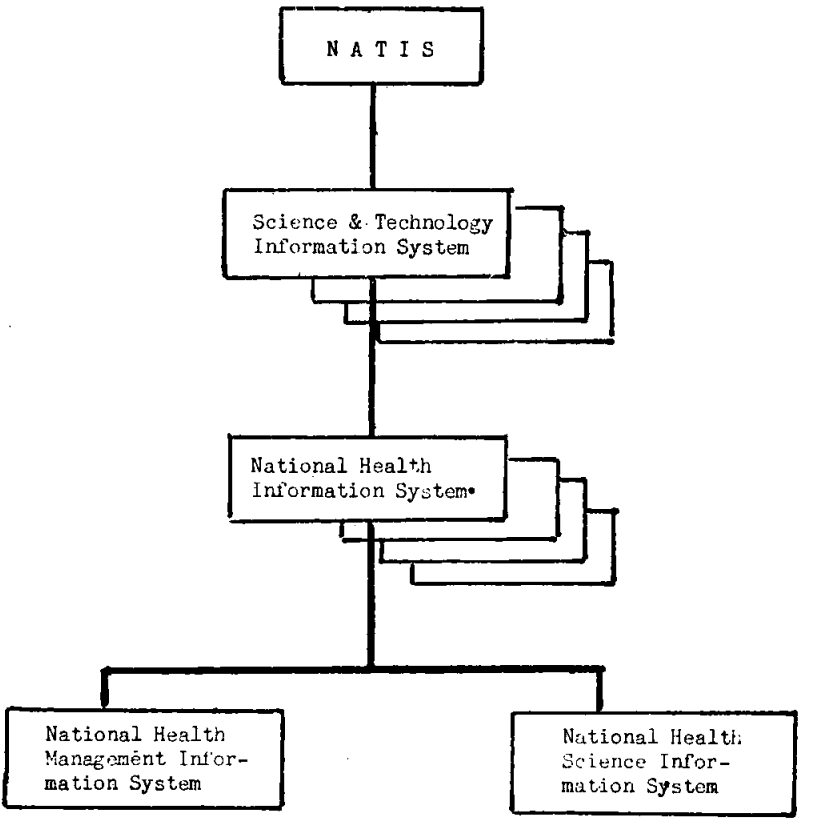


Fig. 2. An alternative for the structure of National Health Science Information System as a component of NATIS.

1.3 Should the Existing National Health Information and Documentation Services be Utilized or a Separate Sub-system be Established de novo for NATIS?

The need for a co-ordinated information system in health system in India has been greatly felt. This has been evidenced by the number of articles/papers presented at the national conference on 'Health Science libraries in India' held at Bangalore on February 5-7, 1980.

In December 1980 another meeting was held. This was the national meeting on the establisament of a health literature library and information service network in the country. This is known as the HELLIS (Health Library and Literature Information Service). HELLIS is a resource sharing network of health sciences libraries of the 7 countries of the World Health Organization South East Asia Region. These are Bangladesh, Burma, India, Indonesia, Nepal, Sri Lanka, and Thailand.

In India, the HELLIS focal point is the National Medical Library in New Delhi with six regional co-ordinating centres in different parts of the country. The centers will be directly linked with the national focal point. Many recommendations which had been reported elsewhere were made at that meeting to ensure effective network linkages. One of them was to establish a broadbased National Advisory Committee for health sciences libraries.

There are other health related information networks in India like those of the National Institute of Health and Family Welfare and National Information Centre for Mental Health and Neuro Sciences and the National Institute for Mental Health and Neuro Sciences (NIMHANS) in Bangalore. It is therefore important to consider whether the sectoral system for health sciences should be planned separately for NATIS or coordinated with the National HELLIS network and with other health information systems in the country.

I.4 Financial Resources

There is need to provide for the financial resources not only for the establishment of the system but for continued operation of the system effectively and efficiently.

1.5 Users Needs

The question that needs examination is how shall the information system consider the users needs.

It seems a eliche now a days to state that information becomes useful only when it is used. However very often we overlook the real needs of the users. We often devise a very elaborate system and when it is not utilised fully, we tend to blame the lack of interest of the users for the situation.

1.6 Use of High Cost Technology

Another question which needs to be examined is that should a high cost technology at present being used in developed countries, be adopted, or should a technology be developed/used which is appropriate at the present stage of development, and the cost of which is afordable?

2 ISSUES CONCERNED WITH PEOPLE

In any system that is man-made and man-oriented man matters most. No matter how efficient the machine is, it is people who will make it work. Some of the issues which will need to be posed are the following :

(i) What are the types of manpower that will be needed for planning, management and evaluation of the information system?
(ii) What are the special skills required for each of the categories of manpower?
(iii) Are there sufficient number of skilled manpower in the categories identified?
(iv) What training programmes are needed? Are they available in the country?
(v) What would be their carrer structure? What incentives would there be for them to remain in this field once they have been trained?

3 ISSUES CONCERNING MATERIALS

(i) NATIS visualizes its functions as documentation, library and archival services. Depending on the policy decisions made with regard to the structure of the National Health Science information System, what should be the document collection policy? Inspite of what is being said that the future information system is going to be a "paper-less" system in a "paper-less" society, I believe that printed documents will remain with us for a long time to come.
(ii) How will the information be delivered? This will depend on the type of users of the system. Most users would ultimately want the informamation in document form and therefore document delivery becomes an important element of the information system.
(iii) Should a resource-sharing network be instituted for the Health Sciences Information System?

It is well known that with the vast expansion of knowledge, no single library can now become the library of 'last resort'. Resource-sharing networks have thus become a recognised method to overcome this problem in developed countries. The problem of acquiring materials with its exhorbitant costs is more acute in developing countries, and thus the need for resource-sharing among libraries is more apparent.

4 ISSUES CONCERNING PROCESS

(i) Is computer technology going to be introduced? The implication of the decision on this question will be far reaching, having an effect on all other aspects of the system viz. People (training), Materials, Process and Machines.

(ii) Will the Health Sciences Information System have documentation, library, archival and clearing house functions? On this decision will depend the specific process activities to be developed for each of the functions.

(iii) How will the so-called "fugitive" literature be collected, catalogued and indexed? In health care, and health sciences resarch literature, a vast number of governmental reports, survey reports, assignment reports of experts for international agencies are not published in the international or national journals or periodicals. Undoubtedly a large number of them would be very useful particularly for health planners, managers, and research workers. It is this literature which has been called the 'gray' or 'fugitive' literature. Whether this literature should in the first place be collected, and if so, how should it be catalogued and indexed is an area needing action. As we know, the thesaurus used by most medical and health libraries in indexing is the Medical subjects Heading (MeSH) produced by the National Medical Library at Bethesda, USA. MeSH is the basis of the indexing in the Index Medicus and is the data base for MEDLINE and MEDLARS. It has been found that MeSH does not cover adequately the terms which are used in the primary health care field—it being based on more 'medical' meaning 'clinical', 'biomedical' subjects. There is thus a need to develop a thesaurus for the health sciences literature to cover these terms used in the 'fugitive' literature.

5 ISSUES CONCERNING MACHINES

(i) Depending on the decisions made regarding the design of the Health Sciences Information System, what type of computer technology will be introduced?

(ii) If a centralized Health Sciences Information System in the form of a central documentation centre is proposed, what physical facilities should it have?

(iii) If the proposed system is to be a resource-sharing network of libraries, that would be the minimum capabilities in terms of resources, would the network libraries need to have, to be able to participate effectively in the network acitvities?

The above mentioned issues under the five headings are of course not exhaustive. But they should give an idea of the areas in which decisions will need to be taken before the actual planning of this system can be undertaken.

PLANNING FOR NATIONAL INFORMATION SYSTEM

SURENDRA NATH MEHTA

1 SCOPE OF THE PAPER

The present paper draws an outline of various factors and steps involved in overall planning the structure, activities and sevices of a national information system. It does not confine to any discipline/mission oriented information system but it gives general guidelines for planning information system at the national level.

2 INFORMATION EXPLOSION

Knowledge is generated at many points in the world over—research institutions, universities and other academic institutions and industrial and commercial organisations. From the point of generation, the knowledge is recorded and communicated, within the organization and outside it through a variety of channels. The variety of literature as a whole is increasing exponentially and is known as information explosion.

2.1 ACCESS TO INFORMATION

Information is a basic resource and link between a variety of activities, intellectual and material, in the society, institutions and individuals. Access to precise and reliable information—scientific, technical commercial and managerial—at the right time to the right person in a form most conveniently usable by him, can help to minimise the wastage of resources due to unnecessary and unintended re-invention, re-discovery, re-development and the making of unfruitful decisions. Further the access of right information can trigger new directions in research, development and managerial action.

2.2 Inadequacy of Existing Information Systems

Since existing information systems meet only certain limited ends within a particular agency or establishment related to the area or fields relevant to specific charter of work of that institution, the process of storage, retrieval and dissemination of information have been geared to the specific requirements of the organisation. Considerable amount of information gap exists because of the large volume of available sources as against the necessity to filter and avoid to large a coverage due to very limited availability of resources. A more discernible gap is the lack of organised flow of information from one agency or organisation to another.

3 NATIONAL INFORMATION SYSTEM

The importance of the National Information System as a powerful national pace is now being recognized by the government, industry and education. The national information system is the means of achieving national objectives through economic and effective utilization of information, in technological innovation, decision making, research and education. A number of recent developments have emphasized the need to focus more attention on the planning of information system at the national level. The primary purpose of a national information system is to share the nations wide resources and their development to fulfil all information requirements of users at all levels.

3.1 Need For National Information System

The effective horizontal transfer of information is becoming vital to the process of economic development at an accelerated pace. Therefore, a planned approach to organise the information to ensure that information gaps are plugged, and a free flow and exchange of information is permitted, would effectively contribute to a total pool of information on a centralised basis. Establishment of a national information system is the only practical solution to provide free flow and exchange of information at optimal cost.

3.2 Advantages of National Information System

National Information System not only reduces the wasteful duplication of intellectual efforts and expenses incurred in providing duplicate coverage of the same material, but also increases the opportunities for improving performances of specific services by enhancing the speed and comprehensiveness of coverage and reducing the number of sources that a user would need to find out the required information. National information system also eliminates the size and distance, and language limitations among the community of users.

4 PLANNING OF NATIONAL INFORMATION SYSTEM

4.1 Need for Planning

Planning is recognized as a salient and continuous feature of all managers. It is the means to agreed aims and objectives and not an end in itself. Planning involves the systematic study of existing resources, present and future requirements, stating goals and organizing activities to achieve the stated goals. Without proper planning no syatem can work efficiently and effectively. Therefore, planning of a national information system, is essential to ensure economic and effective utilization of the resources and fulfil the present and future requirements of the users of the system.

4.2 Advantages of Planning

Planning of national information system would effect the following advantages :

(i) Plannig helps to move systematically towards the achievement of objectives of the system;
(ii) planning helps in clear demarcation and allocation of activities among the components of the system and effectively controlling the course of action towards achieving the objective of the system;
(iii) planning provides a systematic approach to the development of resources and activities of the system.
(iv) planning avoids duplication of efforts, and provides improved and economic services to large number of users of the system; and
(v) planning will draw an integrated and analytical projection of future course of action for the achievement of goals of the system.

4.3 Factors in Planning

In planning a national information system it would be helpful to take into account the following factors :

(i) National development plans and objectives and the objectives and function of the system;
(ii) the component units and their resources;
(iii) the functional organisations of the components into a coherent whole;
(iv) the present and future resource requirements;
(v) the likely constraints, deficiencies and limitations in the operation of the service, and preventive and corrective measures;

(vi) the natural of the environment in which component units are to function and the nature of their mutual interactions; and
(vii) the growth and development of the system in future.

5 STEPS IN OVERALL PLANNING OF NATIONAL INFORMATION SYSTEM

5.1 Objectives and Functions of the National Information System

5.1.1 *The Planning Body*

The planning of national information system calls for a partnership between suitable qualified librarians, and information scientists, and planners concerned with scientific, technical, educational, social and economic development. Therefore a strong representative central body is essential for coordinated and efficient planning and development of national information system. Such a central body would stipulate the objectives and functions, structure and services of the system and provide an assured basis for development of resources and services.

5.1.2 *National Development Plans and Policies*

The objectives and functions of national information system are devived from and in conformity with the national development plans and policies. The national information policy is a component of the nation's over-all development policy. Therefore, national development plans and policies are examined to formulate the national information policy and plan accordingly.

5.1.3 *Objectives of the National Information System*

The objectives of the national information system may by stated in general as under :

(i) Porovision of literature, documents or data (published or unpublished) relevant to and adequate for meeting the present information needs and capable of development to meet future information needs of the generators, processers, disseminators and users of information;
(ii) optimum utilization of existing information systems, their resources and services.
(iii) provision of precise, exhaustive and reliable information with minimum delay, in a manner most conveniently usable by the users;
(iv) promotion of research, development and innovation in information technology; and

(v) development of facilities for education and training in library and information science.

5.1.4 *Functions of the National Information System*

In order to achieve these objectives, the function of the National Information System would be as follows :

(i) To indentify the present information requirements of users at all levels and forecast future requirments in the light of the overall national development plans and policies.
(ii) To foster the building and utilization of national and international information resources needed to meet the present and future information requirements of the users.
(iii) To maintain a broad data base sufficient to accomodate the totality of the information needs of the users.
(iv) To provide computer facilities for fast information access and retrieval.
(v) To provide data and information services to users sufficient to meet their information requirements and stimulate new ideas and approaches to problems.
(vi) To improve coordination between existing national and international, governmental and non-governmental organisations and information systems and exchange of publications, information and expertise in information handling.
(vii) To survey the existing information systems, their resources and services throughout the nation.
(viii) To develop the existing information systems. Their information resources and services, and provide new ones wherever necessary according to the present and future requirement of users through cooperative, acquisition, processing and storage of information resources and the application of latest information technologies for analysis, retrieval and dissemination of information.
(ix) To facilitate efficient and economic inter-lending of information resources.
(x) To establish centralised data bank for quick information services.
(xi) To develop and use efficient tools and techniques of document and information handling.
(xii) To build up expertise and provide for education and training for an adequate number of professional personnel of different categories in library and information science.
(xiii) To secure adequate service conditions and status for library,and information science personnel.

(xiv) To participate actively in research, development and innovation in library and information science to enhance both the efficiency of information services and the quality of information provided by these services.

(xv) To establish standards in materials, techniques and services for use of the components of the system.

(xvi) To coordinate and communicate the resources and services of the components of the systems for their effective utilization through union catalogues, bibliographies, current awareness services, indexing and abstracting services.

5.2 Resources of the National Information System

5.2.1 *Existing Resources*

The existing resources of the system include the existing resources of libraries, documentation and information centres, their manpower and financial resources, their facilities and services for access to information, facilities for training of personnel in librarianship, documentation and information science.

In order to make optimum utilization of the existing resources, actual surveys of resources and compilation of resource directories can be useful.

5.2.11 *Information Resources.* It includes examining of existing libraries, documentation and information centres for their objectives and functions, quality of their collections, their geographical distribution and nature of clientele served by them, their storage capacity and the various information processing techniques and equipments in use.

5.2.2 *Requirement of Resources*

The resources required for the system are given below :

(*a*) *Information Resources* : Requirements may be forecast on the basis of rising trend in number and level of users, trend in the increase of knowledge and its utilization and trends in education, research and development taking into account trends in national economic and social development.

(*b*) *Manpower Resources* : Requirements may be forecast on the basis of the levels of users and their present and future information resources requirements.

(*c*) *Financial Resources* : Requirements may be forecast on basis of information resources requirements and manpower resources requirements.

5.2.3 *Development of Resources*

A Information Resources. The planning for development of information

resources will involve :

(*a*) Allocation of responsibility to various components of the system.
(*b*) Ensuring that at least one copy of each available worth while document is made accessible.
(*c*) Establishment of efficient national lending library services.
(*d*) Provision of adequate reprographic and translation facilities.
(*e*) Establishment of new information centres.
(*f*) Development of necessary tools and techniques for efficient and economic processing, retrieval and dissemination of information.
(*g*) Cooperation with other national and international organisations engaged in information services.

B Manpower Resources. The planning for development of manpower (librarianship, documentation and information science) resources will involve :

(*a*) Provision for pre-service and in-service training.
(*b*) Building up expertise for education and training for an adequate number of personnel of different levels.
(*c*) Supporting projects and research programmes.
(*d*) Sponsoring conferences, seminars, workshops, etc.
(*e*) Securing adequate service conditions and status for library, documentation and information science personnel.

C Financial Resources. The planning for development of financial resources requires to get more funds from more sources and to obtain highest benefits from the available resources. The only feasible solution is to pool the home sources i.e. national budget for information support by national agencies, budgets of academic and research institutions, financial contributions of politic-administrative regions, direct taxes, voluntary contributions, etc and arrange to supplement them from sources like international bodies, organisations, foundations, etc. and other foreign agencies.

5.3 Structure of the National Information System

The structure of National Information System can follow :

(i) The pattern of total centralisation,
(ii) Decentralisation :

(*a*) by geographical area
(*b*) by speciality
(*c*) by function

(iii) A complex combination of (i), and (ii) above

The centralization of technical responsibilities, as far as possible, and decentralization of the services is one of the best means of reducing costs.

A model which could be considered in Indian context for an efficient information flow and linking up of various information systems in different regions of the country as also the central agencies would be based on a grid system with a central nucleus linked with several state and local units located in the country. Such a several tiers national information system would consist of various levels of information centres as follows :

(*a*) National Information System
(*b*) National Information Systems in science and technology, medicine, agriculture, defence, science, patents, standards, small industries, social sciencies, etc. (NIS).
(*c*) State Information Systems in Assam, Andhra Pradesh, Bihar, Delhi, Gujarat, Haryana, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal, etc. (SIS).
(*d*) Local Information Systems (LIS).

The National Information System is a flexible system, with its components operating under a variety of ownerships and jurisdictions, but collaborating togcther under the guidance of a coordinating body. What is envisaged is some sort of federation of many scattered and previously existing information systems, libraries, documentation and information centres and establishing new ones for areas not covered already in order to fill up gaps in information facilities. Where necessary, the existing ones to be upgraded and the facilities augumented. The establishment and maintenance of these would be the responsibility of the agencies of the institutions to which these belong.

5.4 Activities and Services of the National Information System

In order to be an effective single source of information, a data bank, consisting of data base sufficiently broad to cover all types of data required would be organised. The data base would be created by the input of documents selected and collected for the information system, and stored in different files classified under various headings. The data base would be broadened and up-dated with the addition of new documents and information.

The various information services of the system will depend upon the type of information required by the users.

The data bank would be able to retrieve the required data and information

from its store on demand. But to keep the users well informed same alerting services would be required. Some current awareness bulletins produced regularly would keep the users abreast of the latest developments in their respective subject fields. The CAS may disseminate information in the form of current trends, state of art reports, reviews, research in progress, etc. Interest profiles of the users would be maintained to supply information in specialized fields to individuals or group of users, through SDI Bulletins.

6 CONCLUSION

National Information System for a developing country like India is a must. The requirement of relevant, reliable, and timely data and information are necessary for research workers in all fields. So it is absolutely essential to plan national information system for India. The planning of national information system requires qualified and experienced personnel in library, documentation and information science, planners in scientific, technical, educational, social and economic development to join their heads to frame the national information policy, to define the objectives and functions of the national information system in the light of the national development policies and plans. The government should take it as an integral part of national development and provide adequate budget for the development of national information system. Existing information systems and their resources should be analysed quantitativly. Planning should be done to plug all information gaps and allow free flow and utilization of information for national development. The education, training and specialization in various facets of librarianship, documentation and information science, imparted to the personnel engaged in information activities and services and development of their profession and status etc. need due consideration in planning of national information system. Research projects, conferences, seminars on the subject should be sponsored to exchange views and develop new technologies for information handling. A system of feed back should be developed to improve the existing services of the system from time to time. Liaison should be maintained with the national/international agencies and systems engaged in information handling.

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PLANNING FOR NATIONAL INFORMATION SYSTEM

S C JOSHI

0 INTRODUCTION

Information service came into existence only during the First World War. Books are the oldest form of graphic communication of our thought, and we depended on them entirely for a long time for information, but after the Second World War materials such as reprints, patents, journals, microphoto-reproductions, 'etc have become more and more important. Hence the main task at our hands is to systematise and streamline the updated technique of recording the informations so that we can cater to the needs of the intellectuals in a better way. Not only this, the rate of growth of the techniques of recording information in the recent past caution us to have room to accommodate any other upcoming techniques in the near future so that our planning is not short-lived. All these aspects are embraced by our library service. So the crux of the matter at present is how to make library service more and more effective for the scholars, students and teachers alike. To set all these features in a desired and productive direction, planning is must. Without planning to do a thing is nothing but a man moving in the forest.

An information service system is an existent-complex deemed to be an integrated whole made up of functionally inter-related components. The integration of the functions of its different components ultimately manifests as services. It calls for exacting managerial skills. A professional in the field of information services, therefore, has to function as a manager also. The managerial functions involve "control", and plans. Planning, therefore, is decision making regulating the "how" of activities. The determination of the destination is an essential pre-requisite to ascertain the correct path. The control of a production system is particularly dependent upon its planning. The primary significance of planning, in general, lies in the fact : "The control of production system

without planning is a myth." A essential feature of a system is planning, which eliminates adhocism and ensures meaningful decisions in place of adhoc choices. All these hold good in all production situations including the production of information services. The planning of library services calls for a partnership between suitably qualified senior librarians (preferably with post qualifications instructions in planning technique) and planners concerned with educational, social and economic development and development of science and technology, and information technology.

1 PLANNING

The service produced by an information-service system may take the form of either an information-service or a surrogate-service, or a document-service. In practice the courses available in producing such service are many. This is a situation that admits of alternatives planning, therefore, fundamentally consists of choosing from among alternative courses and it holds good in planning an information-service system. Planning, in general, is thus an intellectual process.

In fact, work at every level of a production system can be logically divided into three basic functions. They are :

(i) Planning;
(ii) Implementation (doing); and
(iii) Inspecting (controlling).

The effective system-performance is a function of co-ordination. Co-ordination calls for the establishment of some natural forces to check and maintain balance. The categorisation of all system-task into three functions mentioned above is considered to be most conducive for the establishment of such natural forces.

Normally, in relation to a production system, objectives, policies, procedures, budgets, organisation plans and programme are considered to be the major varieties plan. They may as well be recognised in information service system

The objective of an information-service system furnishes the ultimate goal of the system. It is essential for formulating other plans; and for organising, staffing, directing, and controlling the system as a whole as well as any part of it. It is the basic plan of the system. Hence the objective is "to maximise the use of sources of information."

Policies furnish understanding which guide the functioning of the components of all orders of an information-service system. Policies, therefore; are plans.

Procedures furnish a detailed course of action to be applied in a particular sequence, and deemed to be the one best way to accomplish an activity in a

system. Procedures therefore, are a plan. Pervasiveness through out the system characterises procedures. But the levels of activity warranting more careful control and lesser decision making call for more exacting procedures. Like policies, procedures also correspond to the distinct functional component of different orders of a system. As a result, they also admit of categorisation into divisional procedures, sectional procedures, unit procedures, etc.

Inter-relation among the procedures of different functional components is a common phenomena. For example, inter-relationships among the procedures of the sub-systems-such as, acquisition, technical processing, and storage.

2 BUDGET

Budget furnishes expected result expressed numerically in terms of finance, or in terms of any other measurement admitting numerical expression—such as manhours, machine hours, unit of products, etc. Budgets are indeed control devices formulated in advance for anticipated results. Therefore, budgeting is clearly planning; and budgets are essentially plans. A budget reflecting plan is a sensible standard for effective control.

In planning process the service requires regular money, men, material and equipment facilities if it is once started. So the provision of budget should be got approved yearly after convincing the authorities.

When the establishment of a library service is contemplated, it is essential that financial requirements are investigated. After it is decided what types of service are wanted, it is possible to anticipate the cost with fair accuracy, and this should be estimated as part of the preliminary planning process.

It is recommended that a definite budget be developed within which the information activity is to operate.

The way in which the library budget is administered is determined by the system followed by the organisation to which it is connected. In some instances the budget is a distinctly separate unit. In others where it is a subgroup of a larger division, a detailed budget may not be considered necessary, so that only the total expenditures would be known with any certainty. Though the practice may be satisfactory in some instances, it is not recommended. It is desirable from several considerations to have break-down of figures showing exactly how much is being spent for salaries and books and periodicals as well as for the unique services that are provided by the library.

The proportion of the budget allotted to the information service is influenced by attitude of the management of the enterprise it serves as well as by the nature of its functions.

It is admitted that libraries are expensive, and few economies can be recommended. One temptation is to have a less qualified staff at junior levels but this results into poor research output and the need for information specialists is undoubtedly fact.

Table 1 : Summary of Budget Planning

Item	*Initial costs*	*Annual appropriation operating budget*	*Future needs*
Facilities	Preparation of physical space reconstruction, partitions, wiring, lighting, decorating.	Renovation as needed	Extension, or new facilities.
Equipment and furniture	Purchase of equipment and furnishing	Repairs, replacements and additions as needed.	New or improved equipment furnishing for new space.
Salaries and Wages	Consultants, start-up requirements,	Professional, non professional, Clerical, service labour.	Periodic raises, Expansion.
Collection of documents	Purchase of basic documents, journals and secondary publications	Annual subscriptions addition to document collections, services.	Extension of collection to new fields.
Material & supplies	Initial materials and supplies.	Yearly expendables	Contingency and new procedures
Miscellaneous	Consultants, travel during planning and start-up.	Travel, education services, evaluation of activities.	Contigency, research and evaluation.

2.1 Budget Items

For a contemplated service a projected budget consists of two parts, the first an intitial amount to start operations, and the second recurring amount to run the operations annually. Initial costs will vary widely, depending upon the needs and the scope of the service envisaged.

2.2 Salaries

Staff salaries usually constitute the largest of the several divisions of the total budget. They are dependent on the staffing structure.

2.3 Other Budget-heads

Budget items other than salaries are: Furniture and equipment; Books; Subscriptions to periodicals; back files of periodicals; binding; photocopying service; special equipment, data processing, computer; computer tape service; etc.

Thus after the system has been established, the operating budget should cover salaries of personnel, rental of space and equipment, funds for replacement of old equipment, new equipment, supplies and material, additions to the collection of documents and maintenance of subscriptions and abstracting and translation services, if applicable. Provision should be made for staff to attend professional meeting and seminars. Miscellaneous expeness include telephone, postage and items of a "petty cash" nature.

Budgeting for future requirements entails planning and building into the buget anticipated increases in costs for equipments, supplies, rentals, staff salaries increase due to extension of scope or mission. Plans should include a contigency fund to cover unanticipated developments or losses.

The breakdown of operating costs (approximate) on percentage basis is given in table 2 :

Table 2 : Operating Costs

S No	*Item*	*% often total*
1	Salaries	60%
2	Acquisition	13%
3	Data Processing	5%
4	Services, supplies & materials	5%
5	Rent, depreciation, amortization. equipment	12%
6	Miscellaneous	5%
	Total	100%

Staff-to-user ratios in practice may vary from 1 : 10 staff persons to users to users outside the parent organisation. Ten occasional outside users may be counted as the equivalent to an internal user. Yearly merit and/or-cost of living salary and wage increased are considered routine. These are subject to overall policy of the parent organisation.

Purchase of documents is the second largest component in the budget. Included are funds for books, periodicals, reports, reprints and microprints, abstracts and indexing services, tapes and other machine record formats. Bugdet should be earmarked for translation of material that can not be handled by the regular

staff. Prices of technical and reference books have increased steadily, as have periodical subscriptions and secondary publication services. Even reprints and microprints costs have risen.

3 SPACE

A library should be functioned-oriented, and its accommodation should suffice all the activities of the library. The functions, activities and role of the library and its relationship with other departments of the organisation (in case of departmental library), its clientele, staff and the proposed amenities should be considered while palnning a library. Future growth should also be kept in view in planning the library. Space forecast covering at least 15 years development has to be made, as technical libraries expand about twice their size during this period. However, the space problem in a technical library is less acute than in a university or a public library, and there is less need for such improvisation as providing for multilevel stacks, or arranging for very big room to seat hundred of readers at a time. Still the intensive use of its comparatively small collection by its specialist clientele requires a higher ratio of staff and more implements and tools and consequently more space, however much space may be conserved by a judicious flow process charting.

The main activities of a library are to collect, process library materials, to store, to display and to serve them to the users. Therefore, sufficient and separate accommodation should be provided for all such activities.

The library should be centrally located, and all sections inter-connected. The layout of the whole building should be orderly and cause least interruption in the functioning of the departments. A small technical library may function properly with only three rooms-one for acquisition and processing, the second for collection and dissemination of information, and the third for the storage of books, journals and other materials. In case a library where further expansion is not possible, a double storey rooms with one tier of shelves over another may be the solution. But care should be taken to see that the floor is capable of standing additional load.

What ever shape the library and its departments may take, the same should be brought to the notice of the readers through photcs and diagrams.

3.1 AREA

Space is required for stacks, equipments, staff and clientele. Though there is a connection between the stock, staff, clientele and space required, this space is a variable factor, and careful planning is required to ensure effective use of a limited space. Among the modern methods of minimizing space is to get microfilm copies of important journals, and to dispose of their originals together

with old editions of books. But even without adopting this method for economising space, actually less space is required than what is found to be necessary by the method of calculation.

3.2 Location

The location of the library should enable its clientele to reach conveniently by and the surroundings must be peaceful away from the din and bustle.

4 SELECTION AND ACQUISITION OF PUBLICATION

When a new Information Centre is started the task of determining what books and other supporting publications should be in the collection is a challenging one. It is a real responsibility to see that funds are spent wisely to provide what is needed to promote the progress of the organisation served. In view of the increasing number of books published and the many publishers of scientific books, it is not always easy to decide which titles to acquire. Also the more limited the budget, the more difficult the task.

4.1 Book Selection

One approach to selecting titles for a specific collection is to survey the types of publications that comprise the scientific-technical literature, exclusive of periodicals for present intentions. Advice should be sought, too, from those who will use the library, particularly from members of a library committee, one of the functions of which might be continuous counsel concerning acquisitions.

However, in the process of selecting titles for acquisition it must be recognised that results of scientific investigation are being published in countries and subsequently in languages other than English. Also opinions can be sought from the scientists working in relevant fields. Reviews of books can sometimes be helpful in reaching a decision about their to purchase.

Currently published books, government documents, patents, dissertation and theses pose a serious problem in acquisition and special methods may be adopted to procure them. The library or Information centre should acquire sources of information for all such type of documents.

The other publications like reprints, company reports, translations, standards and specifications may also be acquired in a planned manner.

5 TECHNICAL PROCESS

5.1 Classification

It is essential to place things in their appropriate place according to any

scheme of classification such as : Dewey Decimal Classification; Colon Classification; or Universal Decimal Classification.

5.2 Subject Headings

The real problem in the science-technology field is the matter of finding good up-to-date subject headings to use. The Library Congress List and Sears list were intended for the general library, large and small respectively. They are brought up-to-date by new editions, and the LC list is kept current by monthly supplement. They are useful as guides and both lists could well be on the cataloguers shelf, as reference tools, wherever they are being followed. However, for current usage special indexes should be examined.

A familiarity with the subject field of the individual library will lead one to abstracting and indexing services which will be useful.

Any abstracting or other service prepared by subject specialists in the area will be a valuable source of information for the field for which it has been prepared and should be used as a basis for decisions.

Classification and assigning subject headings in a science—technology library involve more than the ability to fit a book into an existing scheme or to find a specific subject for it. All indexing particularly of periodicals as found in Chemical Abstracts and Index Medicus concern itself with small units, so that each article contained in the journal indexed is brought and made available.

6 SERVICES

Services to the readers are mainly based on three main types. They are :

1 supply of books for home reading from lending department;
2 supply of information and the provision of facilities for study in the library premises-known as Reference Service; and
3 provision of current periodicals.

The library should also give adopt access system so that the readers can get better service from the library. Further the steady growth and developing standard of the library is an important factor to cater better service to the readers. The reference departments should be equipped not only with the conventional reference books such as directories, yearbooks, almanacs, gazetteers, maps, atlases, bibliographies but with indexing, and abstracting services and other types of sources of information including commercially published index to the most frequently consulted periodicals.

6.1 Dissemination of Currently Published Information : Library Bulletin & Other Methods

One of the most important functions of a library's information service in the areas of science and technology is the establishment of a system for reviewing publications immediately upon receipt, selecting information pertinent to the programme of the organisation served, and noting individual items to be brought to the attention, by one means or another, of those persons to whose work they are related.

Once the material is selected, ways of communicating it must be determined. The following methods are among those possible.

(i) telephoning to individuals;
(ii) noting references on slips and sending to individuals;
(iii) routing of periodicals, possibly marking certain articles for attention;
(iv) maintaining a card file of references in the library;
(v) preparing a bulletin for wide distribution at regular intervals;
(vi) duplicating tables of contents of periodicals;
(vii) subscribing to centralized commercial services; and
(viii) utilizing automation for selective dissemination of information.

Each situation must be analysed to determine the best method of keeping the clientele informed of pertinent information as it is published. Any method can be used, or as is more likely, a combination, ranging from personal notifications to a universal bulletins, will be utilized by an alert library staff. It may take some experimenting to determine the most effective method for bringing the facts to those who can advance the work of the organisation.

7 AGRICULTURAL SCIENCE

India is basically an agricultural country and the prosperity and happiness of our nation entirely depends upon the well-thought and immaculate plan. The rural areas are the hearts of the country and the research and development (R & D) programmes are to be formulated in such a fashion that in course of the next few years, India should rise to the great height among the developing nations of the world. Above all the purpose of establishment of the agricultural universities is to facilitate flow of all the required information to build up the rural economy of the country.

Agricultural universities are also complex institutions, with responsibilities for teaching, research and extension education and with linkages to the society to be served. They should fulfil real needs of the people which have not been met and can not be met satisfactorily by the existing institutions.

They should assume a direct responsibility and responsiveness to the needs of the cultivators. The territory served by the university should be extended to the entire state.

7.1 Present Library & Information Services

Every agricultural university in India has a central library of its own which is the centre of its main research and academic activities. Though these libraries function some what efficiently within their limited environment, they lack a proper co-ordination among themselves as well as their rural community. These libraries mostly provide their services to to users of the campus and almost neglect the information requirements of the rural folk. In India, most of the universities though have substations or research stations in different areas of their vicinity, their library and information facilities to those areas are almost negligible. As a result, most of the rural community in India are served by the various extension programmes of these universities. Their methods of dissemination of information are through their extension workers. This breaks the communication channel between the rural community and the important findings of the university research. The communication of information becomes one sided; the role of the library in the dissemination of essential information to the rural community becomes ineffective and the university fails to achieve its required goals at the gross root level.

8 LIBRARY & INFORMATION SYSTEM : A PROPOSAL

8.1 Agricultural Sciences

To solve this lacunae, a proposal for an effective library and information system at the university level is suggested which will help to provide the rural community with the required information for its day to day development.

8.1.1 *Establishment of a Communication Channel*

The sysetm should develop a straight communication channel between the rural community and the university as its first objective. The potential users of the agricultural information of the rural community should have an access to all its research findings in the field of agricultural development as soon as they are confirmed of their usability. The flow of information should be co-ordinated between them in such a way that the communication channel becomes most effective.

8.1.2 *Establishment of a Network of Information*

The proposed network of information should function at three distinct yet

inter-acting levels, i.e. Local level, National level, and International level.

8.1.21 *Local Level*: The Agricultural University should act as the main centre of the information system at the local level. It can be called 'Central Information Unit'. The various research stations of the university should act as the subsystems of the main system. They can be called as 'Branch Information Units'. The Branch Information Unit (BIU) should serve the information requirements of the local organisations, villages, cultivation units, etc. or its vicinity. All these may be called the 'Local Information Unit' (LIU). The rural area served by each research station should be divided conveniently into various 'Cultivation Patches' or 'Units' and these units, otherwise called as "Local Information Unit', should have a direct access to all the information available at their 'Branch Information Unit'. This will help to establish an information net work among the 'Diffused Linkages' of the university.

8.1.22 *National Level*: The Agricultural University which acts as the 'Central Information Unit' at local level, should also form a network of information with other research institutions in the state and should act as a part of National Agricultural Research Information Services (NARIS) organised by ICAR whose primary aim is to organise agricultural information system and establish strong rapport with the co-operation and co-ordination among all the agricultural libraries to serve the agricultural scientists and scholars in India. This will help to establish an information network among the 'Normative' and 'Functional Linkages' of the university.

8.1.23 *International Level*: The National Agricultural ResearchI nformation Service system with its subsystems can be linked to international agricultural systems like AGRIS on the one hand and to the national information system of science and technology like NISSAT on the other.

The agricultural universities are really the 'peoples universities', and their aim should be to serve the people. They should keep in mind the objective that they must serve the needs and aspirations of the rural people of India. If they succeed in establishing an effective network of information among themselves as with the rural community they serve we ean be sure that, their roles for agricultural development programmes in our country, as expected from them will be achieved in future.

8.2 Social Science Information System

The two faces of any society, social change and scientific advancement, equal emphasis is to be given to both social and scientific development. Any lopsided development in one face will be reflected in the achievements of objectives set for the other. Therefore, a study of the society, its cultural, historical and

other heritages which effect the process of change and may obstruct adoptation of newer innovations is of great significance in bringing about national development. It is the regional and local study of the environment by constant apprehension of information regarding the ways and means by which change can be brought about, effective transfer of information could be achieved, to serve the rural poor.

To achieve for the development of society and effective implementation of the various plan programmes a well planned information system is required. Whole hearted attempts should be made to co-ordinate, channelise; and disseminate information to the whole society in an acceptable and assimilable manner. A co-ordinating agency for co-ordinated supply of information, a strong Management Information System (MIS) to guide the decision makers, a full fledged local library able to provide timely, reliable, processed data are a must to lead to the attainment of the set objectives.

8.3 Science and Technology Information System

Science and technology is an indispensable for the attainment of national goals as it interprets knowledge into fruitful applications for the benefit of human society. Scientific and technical (S & T) information also plays a vital role as the basic input for all decision making activities in transforming the blue print for socio-economic development into action.

The existing S & T information infrastructure in India is primarily geared to cater to the needs of Research, Design and Development (RD & D) organisation, educational and training institution, large scale and small scale public and private sector industries, professional associations, government departments, etc. Moreover, the national information system for science and technology (NISSAT) plan has been envisaged as a three-tier network broadly comprising : (i) the sectoral system, (ii) the regional system, and (iii) mission-oriented national centres rendering specialised services which are primarily computer-based. The NISSAT programme has been conceived basically as a sophisticated S & T information network based on existing information facilities. No predominent activity was noticed during last few years on the organisation of S & T information centres at grass root level by the Department of Science and Technology (DST), Govt. of India to suit the specialised information needs of rural areas except some casual resolution to plan and develop the proposed sectoral information system 'keeping this goal (rural bias) in view'. However, a drive in this direction has very recently been given by DST by forming a NISSAT Working Group to evolve a plan of action for building up information resources and provision of services for the small scale and rural industries.

Thus, it can perhaps be inferred that the direct beneficiaries of the existing S & T information system comprise hardly 15% of the total population, since

the media of communication, storage and dissemination of S & T information is primarily confined to documentary sources in a country where roughly 70% of the total population are illiterate.

8.3.1 *Need for Reorientation in S & T Information System*

It is imperative that there should be growing awareness amongst library and information specialists of our country about the basic objective of the new socio-economic development plan which has a predominent bias towards Integrated Rural Development (IRD) by increased agricultural productivity and rural industrialisation. This is so much so necessary for reorienting our existing information set up including the public library system. A glimpse into the strategy for IRD, with special reference to rural industrialisation programme, may appear helpful in determining the structure and functions of the future science and technology information system to ensure smooth multi-directional flow of information for effective implementation of IRD programme in India.

8.4 Library and Information System for Rural Industries

The present technical information set-up of different institutions and organisations are functioning independently so far as transfer of appropriate information for small scale industries and rural industrialisation is concerned is leading to duplication of efforts and inadequate and inefficient use of information resources available in the country. A proposal for redesigning the national information system which can provide the required information infrastructure facilities for rural industrialisation in India has been suggested below.

8.4.1 *Proposed Library and Information System*

The most challenging aspect of library and information system in a developing country like India is to ensure dissemination of available information among all sections of the people, including the vast mass of illiterate persons at their own levels of understanding and assimilation capacity. In this respect the village librarian will have to play very crucial role in making library and information service an important socially relevant subject. But we are quite aware about the organisational as well as functional deficiencies of the state level public library system including rural libraries which has not yet been properly reorganised to effectively disseminate and regulate the flow of appropriate information in a multidirectonal manner, i.e. both towards the top and the bottom of the hierachical line, including a horizontal information dissemination system with the proposed S and T information network in the country.

It is now apparent from the foregoing discussion that the essential prerequi-

site to effective techonlogy transfer for promotion of small scale and cottage industries, besides the development of agricultural and other sectors in the planning and implementation of a well organised Public Library System by integrating and interconnecting the NISSAT information network.

Moreover, a suggestion has been made for the establishment of 'Rural Blocks' by developing the ready organised existing rural libraries. Rural Technical Information Centres (RTICs) will become the focal point of the technical information service to various groups of clientele in rural areas.

8.5 Politics & International Relations

The importance of information gathering and distributing can not be underestimated either in the national level or in the international level. The chief agencies of information distribution are newspapers, magazines, periodicals, radio, television, motion picture. Proceedings of the national legislature, leaflets distributed by political parties, etc. But the performance of these agencies in distributing information to the masses is not satisfactory because they suffer from numerous drawbacks and unless these defects are eradicated we can not tone up their performances. Take for example the newspaper, they are either owned by the government or by big Houses and we can not expect news which is not palatable to their owners. Moreover we have to take into account the fact of press censorship. The government can run its session of censorship over any piece of news which thinks unfit to be supplied to the masses. Next the government's control over radio is total and comlpete. We are in a long way from setting up a coporation in the line of the British Broad Casting Corporation of United Kingdom, which is an information body and free from the control of the government. In case of TV, we can say that as India is a developing country we cannot expect the TV in supplying information in a vast scale like USA, UK, and other European countries. One copy of the proceedings of the National Legislature should be supplied to every public library, and educational institution so that the people can know what their representatives are doing. Lastly regarding feeding information to the people the role of political parties cannot be observed though their information is biased.

A few words in the way of suggestion to tone up the performance of these agncies.

(i) The editors be given a free hand to publish any piece of news even if it is unpalable to their owners;
(ii) Censorship should not be exercised in such a way so as to curb the freedom of expression and writing;
(iii) The information and Broadcasting department be taken away from the control of the government and it should be made a corporation which is

an autonomous body. Thereby we can ensure the impartiality of the chief agency of distribution of information;

(iv) Steps should be taken to make TV popular among the masses.

The information at the international level is exchanged primarily through diplomatic channels and besides this each and every country has its own spy network for gathering information. The CIA of America, KGB of Russia and RAW of India play an important role in supplying information of sensitive nature to their government. Moreover, in this space age the role of Satellites in gathering and supplying information can not be ignored. However, for a free flow of information between countries any suggestion that is made will not be implemented successfully because that will mean sacrificing a part of national interest and no country will like to go ahead with that.

9 EVALUATION OF INFORMATION SYSTEM

The evaluation of information system can be performed in different ways depending on the objectives of the evaluation. The purposes can be to assess technical capabilities, operational performance, and utilization of the system. These evaluations define how well the system performs, they do not tell whether the organisation is spending too much or too little on the system. Evaluation of performance, therefore, needs to be combined with cost/benefit evaluation such evaluation should be performed not only for the system as a whole but as for individual applications and major design alternatives.

The evaluation of the information system function covers the management and operation of information processing. The objective of the evaluation is to measure the quality of current performance in order to improve future performance. The evaluation report should therefore focus not only on determination of weaknesses and strengths but also on suggested improvements. To assess categorically the efficiency of our service system, a questionnaire may be fed to the regular clientele and suggestions may be sought.

10 CONCLUSION

An unequivocally important aspect of information system is to pay protracted attention to user's specific needs and here the librarian plays the key role. This can be done in most effective way by observing the types of request made by the users and by innovating investigatory techniques. For any information system with set objectives to realise the goals through the process of evaluation feedback system is the interlink where the participation of user is sought and categorically it is useful in special libraries as scientific and technical library.

Information system is the yard stick to the overall growth and development

of society. Technical, socio-economic development is direct consequence of information system. Hence the planning and implementation of information system is the product of careful conscientous immaculate thorough working and co-ordination amoung librarian, educators and the government.

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PLANNING OF LIBRARY AND INFORMATION SERVICE FOR ZOOLOGICAL LITERATURE

BIPUL KUMAR CHAKRABORTY

1 INTRODUCTION

In the history of human societies and fundamentally throughout the evolution of man, it has been noticed that sharing of knowledge is a form of power necessary for progress, newer discoveries and survival. The role of scientific and technical information service, therefore, in a developing country like India, is of great importance to meet the needs of the country.

The rapid growth of scientific knowledge, and the increasing number of scientific workers requiring such information, etc., necesitate a suitable National Information System on a priority basis. Not only the developing countries have realised the importance of this need. In India, there are a number of information centres which cover various fields of science and technology. Some of the problems which need consideration while discussing national information system are : coordination with the national and international information systems; training of information scientists, librarians and documentalists through regular courses; user's education, holding of seminars, symposia, workshops, demonstrations, etc. and laying of standards and guidelines for information handling and passing on the scientific knowledge to the scientists working in different fields. In this communication the author has dealt with some of the more important agencies that are rendering information service in various fields of zoological research and the role played by Zoological Survey of India.

2 ZOOLOGICAL INFORMATION SERVICE

2.1 INSTITUTIONS

There are as many as 24 research establishments under the Indian Council

of Agricultural Research (ICAR) which are actively engaged in research in agricultural sciences. In addition to ICAR, the other institutes which are in a position to render information service in zoological science are Animal Nutrition Research Centre, Bombay; Animal Production Research Institute, Birauli; Central Bee Research Institute, Poona; Central Inland Fisheries Research Institute, Barrackpore; Central Institute of Fisheries Technology, Ernakulum; Central Marine Fisheries Research Institute, Mandapam Camp; Central Rice Research Institute, Cuttack; Hydrobiological Research Station (Fisheries), Madras; Indian Veterinary Research Institute, Izatnagar, etc.

3 LITERATURE EXPLOSION AND ITS IMPACT ON ZOOLOGICAL SCIENCES

The impact of 'literature explosion' to a zoologist has been very severe. The emergence of new concepts like wildlife projects, fishery biology, zoogeography, bacterial genetics, study of systematic zoology and faunistic surveys have led to the growth of zoological literature which plays a great significant role in the field of research. Thus to cater the information needed by the Zoologist, it is necessary to select all published and unpublished information by tapping right sources at the right time, as well as to cover similar information sources in other related areas and frontier disciplines. It it also a difficult task for an organisation like Zoological Survey of India (ZSI) to procure all the research publications both published and unpublished due to limited financial resources, space and shortage of manpower. Further, indexing, abstracting and current awarences service (CAS) from foreign countries have been the main source for retrospective information search so far as this discipline is concerned. The efforts in India have been mainly initiated by Zoological Survey of India for collection and dissemination of information network in the field of zoology. In India, there are many organisations who are directly or indirectly involved in the study and research of new concepts of zoology but proper planning for national information system in zoology has not yet been implemented on national and international basis. Efforts for systematic gathering, processing, storage, retrieval and dissemination of wide range of information of interest to zoologists will be a welcome step.

Trade literature, directories, union catalogues, technical/annual reports, centralised documentation and bibliographical services, computer based SDI systems, current contents of literatures, and citation Index are some of the important projects which can provide an exhaustive and pin-pointed service in the field with the necessary infrastructure and will help us setting up a well-planned information system on zoology. Due to ever increasing volume of published literature in all fields of science and technology, particularly in the field of systematic zoology, a well-planned supporting documentation service under the

guidance of an efficient information scientist with adequate background knowledge in zoology can solve the problem. Finally, it is urgently needed to have a complete collection of periodicals and patent literature pertaining to this area of knowledge by air mail at a central place in India. Such a centre may issue, after proper and speedy documentation work, a weekly or fortnightly classified content list. This may be circulated to various research laboratories and establishments all over the country. The reprographic copies of the relevant items of interest should be available from the central place on request at nominal cost. In respect of information exchange among laboratories with the same or similar research interest, the organisation of a preprint exchange programme has proved to be most helpful.

It is also proposed that : (i) all universities and institutions should send their publications containing zoological information to the Zoological Survey of India, Calcutta & its regional offices in India so that an efficient information service could be rendered by this organisation to the scientists; (ii) that the Information Scientists and Documentalists should meet together at the seminars, symposias, conferences etc. as arranged by different library associations to discuss the problems in respect of this service; and (iii) that the other state and central scientific institutions, universities should also start this information service so as to meet the growing needs of our ecientists and to help in building prosperous India.

4 ROLE OF ZOOLOGICAL SURVEY OF INDIA

The library of Zoological Survey of India, Calcutta (HQ), is the largest and richest as far as zoological literature in South East Asia is concerned. It contains more than 60,000 books in zoological sciences and is subscribing annually to about 650 periodicals, both Indian as well as foreign. Significant information services are being rendered to the scientists engaged in the various fields of zoological researches in the universities and other scientific and technical institutions by way of loaning books, periodicals and by supplying photocopies from the documents available in the library. The department also has a number of its own publications, viz., (i) *Records of Zoological Survey of India*, (ii) *Memoirs of Zoological Survey of India*, (iii) *Annual Reports of Zoological Survey of India*, (iv) *Newsletter of the Zoological Survey of India*, (v) *Bulletin of Zoological Survey of India*, (vi) *Bibliography of Indian Zoology*, (vii) *Fauna of India Series*, (viii) *Miscellaneous : Occasional Papers of Zoological Survey of India*, etc. All these periodicals are being sent to different organisations engaged in zoological research in India and abroad. Recently, the microfilm apparatus and a Reprographic unit have also been set up to provide better information service to the scientists and organisations and to preserve microfilm and Oce copies of the important, fragile and old documents.

5 PLANNING FOR MANPOWER DEVELOPMENT AND INFORMATION HANDLING

Manpower development is the most vital issue in a developing country like India. Data on manpower is required primarily for assessing manpower trainning requirements, providing for maximum possible employment, rationally providing for urban and rural growth and identifying and analysing the problems and formulating policies to overcome them. Training courses on Systems Analysis, information systems and services, on national level heve so far been organised with the help of experts from DRTC, Bangalore, INSDOC, Delhi, BARC, Bombay and IIEM, Calcutta. These courses were devoted so far to give an exposure to the participants on some of the fundamental rudiments of systems analysis and information sciences. In the process, more attention was also focussed on subjects like computer handling of information, queueing theory, etc.

The objective of the courses is to provide the scientists an over-all view of the information handling and to equip them with the ability to do such kinds of work as abstracting, preparation of digests, patent information, state-of-the-art report, trend reports, providing product/process information services, etc. by which they could be of considerable assistance to the sectoral system of NSSSAT.

PROJECT MANAGEMENT INFORMATION SYSTEM (PMIS)

V K RANGRA

1 INTRODUCTION

Projects play significant role in the development of national resources. Recently Smt. Indira Gandhi expressed her concern over delay in the projects, which results in cost escalation. This goes to emphasise the importance of planning in the formulation and execution of projects by using modern methods such as network analysis. Management Information System (MIS) plays equally important role in project management by providing processed information to the top management for dscision making.

2 WHAT IS A PROJECT

A project is defined as an organised programme of investigation and activity carried out to reach a defined goal, often of a non-recurring nature with a specified terminal point. The term project is associated with product and process development in industry and mission oriented public agencies. The projects are further classified as defensive and aggressive. Defensive project aims at strengthening the competitive position of the present product line; it includes quality and process control, technical service, product and process improvement and development of product and process, using the latest technology and marketing methods. Aggressive project is concerned with serving customers in ways or entering new industrial and commercial fields. It includes development of innovative products or processes, new product line and oriented long-range research and development.

ASIAD'82 may be quoted as example of a complex project, which the Government of India has in hand, to hold the 9th Asian Games at Delhi. ASIAD'82 project comprises construction of 5 new stadium, expansion of 12

existing ones, 7 flyovers, 853 houses for the Asian Village and 10 five star hotels. The Indoor Stadium considered to be marvel of modern architecture alone engages 7000 labourers working in two shifts, over 50 engineers/architects and 49 separate agencies. The project has a time frame of 20 months and is scheduled to be completed by 1st September 1982.

3 PROJECT LIFE-CYCLE

Karger and Murdick have described the project life-cycle in terms of four successive phases :

(i) Conceptual Phase—It deals with proposal activity upto the time that a formal proposal is submitted. It consists of basically the problem definition and solution feasibility.

(ii) Initiation Phase—It begins with acceptance of the proposal and involves the detailed programme planning effort. During this phase, programme requirements are drawn in detail and project planning (including PERT and CPM models), organisation, staffing and control concepts are developed.

(iii) Operational Phase—This phase spans all technical activities directed at fulfilling the work scope and producing the end product (prototype development, production hardware units and so forth).

(iv) Terminal Phase—This phase begins at the close of the technical activity (as required by the programme schedule) and brings the programme to termination. The phase consists in consolidating information, messaging data, shifting and analysing results and drawing conclusions in preparation for the final report.

4 PROJECT MANAGEMENT

Management is often required to make key decisions in the life-cycle of the project which are represented by four key interrelated parametric groupings i.e. time, cost, performance and risk. In project management certain planning and control techniques, notably the Programme Evaluation and Review Technique (PERT) and Critical Path Method (CPM) are used to help the project manager to coordinate project tasks and control work accomplishment. PERT/CPM also called network techniques, assist the manager in assessing the two critical inter-relationships :

(i) the interface between various elements and work groups involved in the project.

(ii) the relation between current status and likely status at some future point.

This enables the management to plan and institute corrective actions on a more timely and effective basis.

5 MANAGEMENT LEVELS AND THEIR NEEDS

There are three management levels :

(i) *Strategic.* This represents top management and comprises Chairman of the Board, President and Vice-President of major sub-system.

(ii) *Tactical.* This represents middle management and comprises managers of plants, stores and regions.

(iii) *Operational.* This represents lower level of management and includes supervisors and foremen.

All managers direct the resources to the attainment of objectives. The strategic level (top) is most interested in direction that leads to the accomplishment for long-range, general objectives. The operational level (lower) managers are most concerned with immediate successive objectives. Whereas the top management needs more of environmental information in summarised form, the lower level wants more of internal information in detailed form. The tactical level representing the middle management follows the midcourse; its needs overlap with those of the strategic and operational levels.

Information is recognised as a resource like any other such as manpower, money, material and machinery, which the management endeavours to use in the most efficient way. An effective information system is necessary for the management, to gather raw dato, process it into useful information and make it available to individuals at various organisation levels. While designing such a system, the following points should be kept in mind :

(i) Quality — How accurate must the information be?
(ii) Quantity — How much information is needed?
(iii) Timing — How much time can elapse after an action by the physical system until it is reported to the manager?
(iv) Cost Vs Return — The cost of information should never exceed its value.
(v) Presentation Mode — How will the information be presented—in the form of numbers, narrative or graphics? Will the information be printed or displayed on screen (VDU)?

6 MANAGEMENT INFORMATION SYSTEM

Management Information System (MIS) as defined by Walter J. Kennevan in

the 1970 International Data Processing Conference, is "an organised method of providing past, present and projection information relating to internal operations and external intelligence. It supports the planning, control and operational junctions of an organisation by furnishing uniform information in proper time-frame to assist the decision-making process". MIS not only selects but also computes, processes and transforms the data into meaningful information. The third generation computers offered much greater speed and data storage capabilities, which was a requirement of the MIS. Actually the concept of MIS was promoted by the computer vendors, which was readily accepted by many computer users, since a real need existed for better management information.

There are six reasons to justify a computer-oriented MIS :

(i) To obtain otherwise unobtainable operationel information e.g. cost data.
(ii) To obtain more accurate information than would otherwise exist-data based with international coverage which are available on-line, can give more upto-date and accurate information.
(iii) To inform both formal and informal information management control systems personnel about current operations problem so that these personnel can take appropriate action as soon as needed.
(iv) To enable operations managrment to predict day to day operations levels for better material, tool, labour and machine scheduling and current work balancing,
(v) To enable operations management to predict and prevent project cost overruns.
(vi) To enable top management to do true long range planning based upon day and month operational levels actually experienced.

6.1 Decision Making and MIS

Decision making is defined as the process of selecting from among the alternatives a course of action to achieve an objective.

MIS can improve decision making in three ways :

(i) *Upgrading Existing Clerical Systems*

The overwhelming number of computer applications (estimated upto 98%) are of clerical nature. It, therefore, becomes evident that an enormous potential exists for upgrading these systems for operational decision making.

(ii) *Pragramming Routine Decisions*
Routine and repetitive decisions constitute about 90% of the decisions, the manager makes, which can be programmed. The essential element in programming decisions is the *decision rule* e.g. record if inventory declines below X level.

(iii) *Non-programmed Decision*

Most of the really important and costly decisions remain non-programmed and do not *lend* themselves to automatic solutions. Almost all top management decislons remain in this category. The problem is to furnish information that will help the manager make the unstructured, ill defined, non-programmed decision. This is the area where MIS plays the dominant part.

6.2 Design of MIS

There are six steps in the design of an MIS :
(i) Set system objectives.
(ii) Determine information needs.
(iii) Establish system constraints,
(iv) Determine information sources,
(v) Develop the system concepts (system flowchart, inputs, outputs, etc).
(vi) System implementation.

6.3 Elements of MIS

There is a defined objective which the management, has to achieve within the stipulated time and cost frame. Input resources in the form of data generated during processing of the project undergo transformation process and are converted into desired data in the form of output resources. Information Processor converts output data into meaningful information which can be used effectively for decision making by the management. The feedback in the form of decisions from the management is further added to input resources. Data must be distinguished from information. Data is merely facts and figures which has llttle to do with decision making. Data when evaluated in a speclfic situation becomes information. It is the essential job of MIS to turn data into information. A diagramatic sketch of conceptual MIS is given at fig 1.

7 MIS AND THE PROJECT

Role of MIS in the successful completion of the project is very vital. It is the communciation medium between the management and the working of diffe-

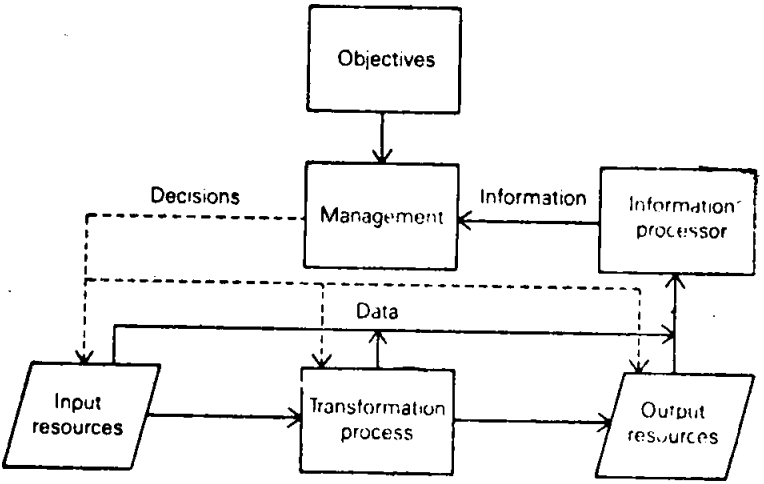


Figure 1 A Concept Mis

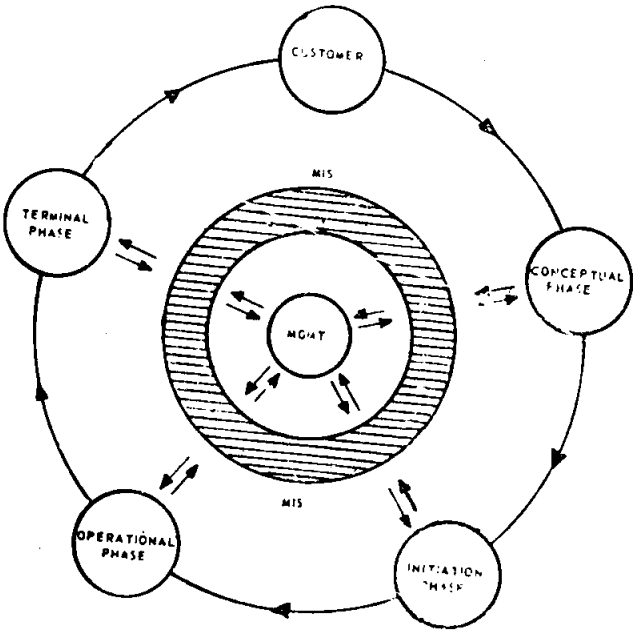


Figure 2 : Project management information system

rent phases of the on-going project. It collects information on the completion of activities as per schedule indicated in the network and computes in terms of time and cost. It keeps a constant watch on the progress of the activities lying

on the critical path of the network as these are the activities which are most significant for the completion of the project and demand urgent attention of the managemnt. A specimen of network showing the critical path is placed at Appendix 'A'. A model of the Project Mangement Information System showing interaction between the management and the various phases in the project lifecycle is given at Fig 2.

8 PROGRESS REPORTING

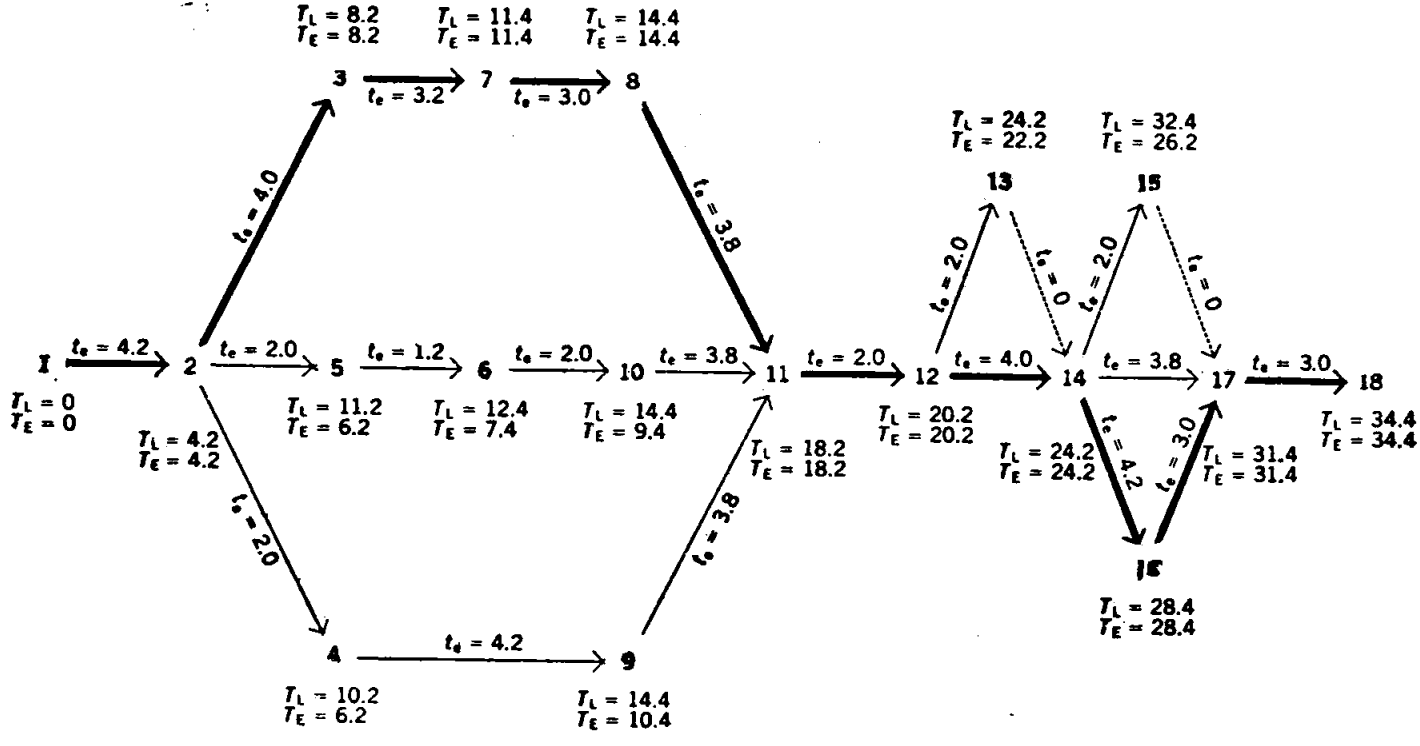
Progress reports issused by MIS set out the technical, manufacturing and financial status of the project and compare the performance in each of these respects to the scheduled requirements. A specimen of a progress report giving achievement analysis, relating to expenditure is given at Appendix 'B'. These reports are issued at regular intervalas or whenever demanded by the management. There are also reports of exceptions which are confined in scope to those project factors which are giving rise to acute concern and demand immediate attention if the project is to be held on course.

9 CONCLUSIONS

Modern projects require proper planning based on well established techniques such as network analysis. MIS plays a vital role in providing accurate and timely information on the progress of the project. In case the progress is behind schedule, the management can put extra resources or take other appropriate steps to correct the deviation, thereby ensuring adherence to the time schedule. In this way MIS by functioning effectively can check cost escalation which is the result of delayed projects. *It is suggested that all major projects, costing Rs 50 lakh and above should be equipped with MIS.*

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Network showing earliest and latest times. Legend: ⟶ represents critical path.

APPENDIX 'B'

ACHIEVEMENT ANALYSIS

Department : Engineering
Project : Servo Control & Sensor Unit

Date : March 1968
Sheet 1 of : 1

	Activity	*Estimate Man Weeks*	*% Achieved*	*Man Weeks Achieved*	*Man Weeks Actual*
0001	System Design	10	100	10	25
0002	Write design specification	1	100	1	1
0003	Design + 35 × Power Supply	3	100	3	4
0004	Broad based stage	2	100	2	1
0005	Package	2	100	2	1
0006	Prototype	1	—	—	—
0007	Write test spec	1	—	—	—
0008	Design + 10 × Power Supply	3	100	3	2
0009	Broad based stage	2	100	2	1
0010	Package	2	50	1	0.5
0011	Prove Prototype	1	—	—	—
0012	Write test spec	1	—	—	—
0013	Design — 15 × Power Supply	3	—	—	—
0014	Broadbased Stage	2	—	—	—
0015	Package	2	—	—	—
0016	Prove Prototype	1	—	—	—
0017	Write test spec	1	—	—	—
0018	Design same circuit	10	100	10	8
0019	Broadbased stage	3	100	3	2
0020	Package	3	40	1.2	1.5
0021	Prove Prototype	2	—	—	—
0022	Write test Spec	1	—	—	—
0023	Design Servo Control	5	20	1	2
0024	Broad based Stage	4	—	—	—
0025	Package	2	—	—	—
0026	Prove Prototype	3	—	—	—
0027	Write test Spec	1	—	—	—
0028	Design main Chasis	2	25	0.5	0.5
0029	Carry out System test	2	—	—	—
0030	Environmental test	2	—	—	—
0031	Write overall test Spec	4	—	—	—
0032	Write operating instruction	3	—	—	—
0033					
0034					
0035					
0036					
0037					
0038					
0039					
0040					
	Departmental totals	85	46.7 %	39.7	49.5

SECTORAL INFORMATION SYSTEM FOR SCIENCE AND TECHNOLOGY IN UTTAR PRADESH : A PLAN

R S SAXENA

1 SCOPE OF THE PAPER

The state of Uttar Pradesh which is the second largest state in India and houses prestigeous 100 research institutions including 20 universities and all of them possessing excellent libraries but there exists a complete lack of information net-work by which coordination and resource sharing could be effected for the mutual benefit of each of the existing libraries. An economical scheme of resources sharing of scientific and technical literature of the libraries located in the state based on the concept of Sectoral Information Dissemination Centres has been suggested by means of creating 5 data bases and one data bank at the appex to serve as State Cooperating Centre. The manpower and the initial expenses needed for setting up the infrastructure of data bases and date bank have been worked out.

2 BACKGROUND

The importance of science and technology information in the socio-economic and cultural development process needs no elaboration as it has been fully established that the mere presence of technology skill and manpower does not constitute technological progress. The useful social goals can only be achieved if the technological hardware, the operational skills and brainware are adequately supported by services like management and information. Since 'knowledge or information is power' it is true that with the technological advancement and the increased competition the technological progress is largely dependent on the availability of latest information on or about a particular technology or

industry and demand that the information service increases with the rapid industrialisation and exploitation of science and technology for the benefit of the society as a whole and that of a man on the street.

2.1 Present Position in the Country

The concept of information and particularly of systematically organized technological information has not yet clearly made its entry in our country as a major objective and still plays a minor role in the general flow of communication. Potential users are, therefore, not yet very accustomed to technical reading matter. Under the Departments of Science and Technology (DST) an agency NISSAT has no doubt been set up as a coordinating agency to interlink the existing and future information sources, systems and services in the field of scientific and technological information, into an effective net-work. This central body will also act in close cooperation with international information dissemination agencies like UNISIST, NATIS, VINITI, etc. However it has been observed that the envisaged goal of NISSAT will take some time to materialise and sufficient discrepancy between the service provided and the real needs of the readers exists, as a result of which there is some what under utilization of locally produced information for development purposes. Since our country is very large and information stored and produced is quite extensive a proper infrastructure based on Statewise Sectoral Resource Network System should be developed which ultimately may be linked with the national and international networks of industrialised countries.

2 2 Situation in Uttar Pradesh

The Uttar Pradesh State which is the second largest state in India with a population of 11 crores distributed in 56 districts, covering an area of 294,413 sq. kms., houses prestigeous research institutions, twenty universities including I I T and two Agricultural Universities, cater to the demands of the largest State Legislative Assembly in India and stores some fabulous private collections. All these institutions possess excellent libraries and the number of such libraries runs to over 100. There is hardly any shortage of information but each library is functioning in isolation and there is non existance of any information net-work by which coordination and resource sharing could be effected for the mutual benefit of each of the existing libraries. Due to exponential rate of growth of literature in science and technology and the rising cost of literature every year by 25 percent or even more coupled with the problem of storage space and technical processing of the material acquired in libraries it is almost impossible for any library to have self sufficiency in literature holdings. The only solution to this problem is resource sharing by a viable system. This system taking into account the magnitute of the problem and vastness of the

coverage can be created by setting up comprehensive and exchangeable bibliographical data bases at different levels which in turn be merged into a bigger data base in due course.

3 SECTORAL RESOURCES NET-WORK

As already known to us the sectoral resources net-work which involves the participation of only such libraries spread all over the state which have common fields of specialisation like medicine, engineering, agriculture, etc. This system has three levels with the participating libraries at the lower level, the designated operating centre at the upper level. The operating centre in the sector would utilise the resources held in the participating libraries and acquire, store and make available those titles not held in the collection of any library and the state centre would coordinate the activities of sectoral operating centres as well as link it with the national and international networks of industrialised countries.

3.1 Organisational Set Up of Sectoral Net-work in U P

There are at present 7 excellent computers in the state and the computer potential can be well utilised in creating data bases. Each data base being given the responsibility of storage of data on the subject fields alloted to it and keep on updating the same by processing new inputs on yearly basis (or as per demand of the nature of information).

The sectoral distribution of subjects to different data bases may be as follows :

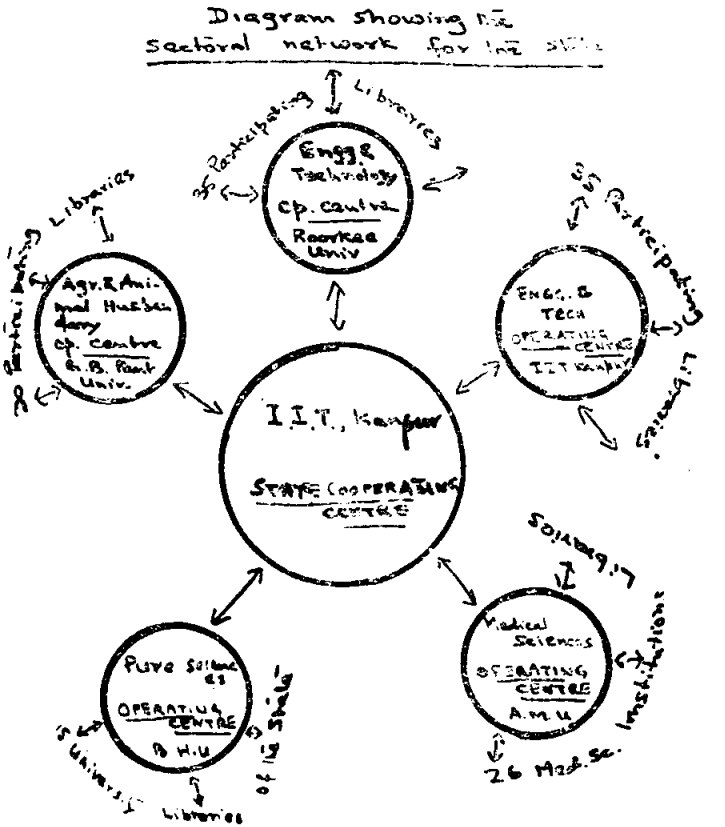
Table 1 : Proposed Subject Specialization of different Data Bases

	Location of operating centre having a data base	*Subject field to be covered*	*No. of participating libraries*
	(1)	*(2)*	*(3)*
1	G B Pant University of Agriculture and Technology, Pant Nagar	Agriculture and Animal Husbandry	30 as per list (Appendix 1)
2	Roorkee University, Roorkee (Engineering and Technology)	Civil Engineering, Earthquake Engg., Hydrology and Architecture	35 institutions in the (Appendix 1)

(Table 1 *contd.*)

(Table 1 *contd.*)

(1)	(2)	(3)
3 I I T, Kanpur (Engineering and Technology)	Electrical, Mechanical, Metallurgical, Chemical and Aeronautical Engg.	35 Engineering institutions (Appendix 1)
4 Benaras Hindu University, Varanasi	Pure Sciences, i.e. Physics, Chemistry, Mathematics, Botany, Zoology and Earth Sciences	15 universities of Uttar Pradesh as mentioned in the Appendix 1
5 Aligarh Muslim University, Aligarh	Medical sciences	26 Medical science institutions of the state



Further the State Centre may also be set up at IIT, Kanpur which would coordinate the activities of the aforesaid five sectoral operating centres and will inter-link the activities with national and international net-works. The entire set up has been diagrammatically represented in the opposite page.

3.2 Infrastructure Needed for the Sectoral Network Setup

The following steps are to be taken for having a proper infrastructure for the sectoral network setup :

(i) Suitable computer programmes may be written by mutual consultation of the operating centres at a chosen centre preferably I I T, Kanpur and which may be distributed to other participating centres to ensure exchangeability of punched cards/tapes;
(ii) A data collection format has to be drafted with the mutual consultation for the sake of information;
(iii) Each operating centre will distribute data collection forms to all the participating libraries falling in its jurisdiction and collect the data forms at regular intervals;
(iv) Cards will be punched, batch processed and print out taken, separately at all the five operating centres;
(v) The data stored in each centre will have to be updated by a similar process, half yearly by merging current data with the data stored on tapes at each operating centre.

3.3 Financial Liability

Since practically all the five proposed sectoral information centres as well as the state cooperating centres have their own computers and are currently planning to create data bases of their entire collection through computer processing and to store the data on tapes for continuous updating, it would therefore be quite simple and easy for them to accept the proposed additional responsibility of acting as a sectoral centre, as it would be simply an extension of their own project of automation and only a little recurring and non-recurring financial support is needed for the project. Appointment of separate programmers or programme managers is not needed for starting the work. As a humble beginning at each operating centre the following additional equipments may be acquired and below given minimum recurring and non recurring expenditures will be involved :

Non-Recurring		*Cost (approx)*
(i) X-Rox Machine	One	Rs 1 lakh
(ii) Punching Machine	Two	Rs 1 lakh
(iii) Card-to-tape data logger Machine	One	Rs 1.5 lakh
	Total	Rs 3.5 lakh

Recurring		
(i) Punch Operator	Two @ Rs. 600.00 per month	Rs 18,000.00
(ii) Punch cards	5 lakh @ 42 per thousand	Rs 21,000.00
(iii) Stationery for print outs and X-Rox		Rs 20,000.00
(iv) Honorarium to be paid to internal staff for the extra @ 10 percent of the salary project work		Rs 10,000.00
	Total	Rs. 69,000.00
	Say	Rs. 70,000.00

From the fore-going calculations we find that for making an humble beginning of the project and initial investment of Rs 3.5 lakh as non-recurring expenditure and about Rs 70,000.00 as recurring (yearly) expenditure on salaries of staff and stationery, etc. has to made.

4 SOURCES TO FINANCE THE PROJECT

It has been observed that all the university libraries of the state and the various scientific and technical libraries taken together spend more than 2 crores of rupees in buying books and subscription to periodicals. If each such libraries decides to spend 5 percent of their budget on computerising their library services and jobs such as cost of data collection slips, the cost of man hours needed to fill these up, carrying out the modifications and updating of their respective catalogues the recurring expenditure on the project can be easily financed by each participating library as well as the organising centre. Further the non recurring expenditure required for acquiring machinery and equipments

to the tune of Rs. 3.5 lakh can conveniently be taken care of by the funds provided by Central Government agencies like U G C and Ministry of Education, Government of India or the Department of Science and Technology, Government of India as this project would be on the lines of partial fulfillment of the NISSAT project of the Central Government.

5 ACCESS TO DATA BASES

One copy of the bibliographic data base which incorporates the document description and the surrogates of document description and document analysis available at the operating centres may be stored at the state operating centre i. e. I I T, Kanpur. All participating libraries of state who have agreed to put the input to the data base from the literature available with them in the subject field assigned to them may get free access or at a nominal cost to the data base centrally created known as Data Bank. The operation of the data bank may be on the lines of MEDLARS, MEDLINE, CANCER LINE, AGRIS and INIS, etc. For outside parties the data bank facility may be made available against payment which may depend upon the nature and extent of services offered to the party.

6 CONCLUSION

In order to face the challenge of 'explosion of knowledge' posed by the fact that on an average about 1,000 new books are published every day in the world in addition to some 33,000 newspapers and 70,000 periodicals and to overcome the problem of acquisition, storage and dissemination of knowledge contained in 12 to 14 million documents produced each year which according to a recent estimate contain nearly 72 billion pieces of information, resource sharing by means of creation of data bases at different levels which in turn may be amalgamated into bigger data base known as data banks is a must to meet the demand of potential readers, research workers, scientists or industrialists. The task of creating data bases for having a comprehensive listing of all the material available in the country or abroad being a giagantic one automation is necessary and computer's assistance in handling the situation can solve the problem to a great extent. An humble beginning in this direction can be made, in the State of Uttar Pradesh by creating data bases and data bank for the entire literature holdings of about 100 scientific and technological libraries of the state in the field of science and technology alone. A provision of this nature may act as sectoral information dissemination set up for resource sharing in the state and this may eventually be linked up with the national and international information dissemination agencies such as NATIS, INIS, CODAT, NTIS, NISSAT, VINITI, etc. The recurring and non-recurr-

ing cost involved for such a set up will be about Rs 1 crore yearly which is within the reasonable financial capabilities of the state and is not even 1 percent of the yearly budget on education of the state. The success of the project undoubtedly depends mainly on the support enthusiasm and cooperating of all the professionals serving in the participating libraries of the project and the government and non-government agencies responsible for the running of various scientific and technical libraries spread throughout the state.

APPENDIX—A

SUBJECTWISE DISTRIBUTIONS OF INSTITUTIONS IN UTTAR PRADESH

S No	*Agriculture and Animal Husbandry*	*Engineering and Technology*	*Medical Sciences*	*Pure Sciences*
(1)	*(2)*	*(3)*	*(4)*	*(5)*
1	Allahabad Agricultural Institute, Allahabad	Aerial Delivery Research Development Establishment, Agra	Ayurvedic and Tibbia Academy, Lucknow	Agra University, Agra
2	Birbal Sahani Institute of Paleobotany, Lucknow	Bharat Heavy Electricals Ltd., Hardwar	Ayurvedic College, Attara, Distt. Banda	Aligarh Muslim University, Aligarh
3	Botanical Survey of India, Allahabad	Bharat Heavy Electricals Ltd., Jhansi	Central Drug Research Institute, Lucknow	Allahabad University, Allahabad
4	Botanical Survey of India, Dehradun	Central Building Research Institute, Roorkee	Central Indian Medicinal Plants Organisation, Lucknow	Benaras Hindu University, Varanasi
5	Central Food Technological Research Institute, Lucknow	Dayalbagh Engineering College, Agra	College of Medical Sciences, Varanasi	Bundel Khand University, Jhansi
6	Central Sheep and Wool Research Station, Dehradun	Directorate of Geology and Minning, Lucknow	Dental College, Lucknow	Chandra Shekhar Azad Agricultural University, Kanpur
7	Chandra Shekhar Azad Agricultural University, Kanpur	Geodetic and Research Branch. Survey of India, Dehradun	G S V M Medical College, Kanpur	Garhwal University, Srinagar, Distt. Garhwal
8	Forest Research Institute and College, Dehradun	Geological Survey of India, Lucknow	Gurukul Kangri Vishwavidyalaya, Hardwar	Gorakhpur University, Gorakhpur

Appendix A *(contd.)*

(1)	(2)	(3)	(4)	(5)
9	Govind Ballabh Pant Agricultural and Technological University, Pantnagar	Harcourt Butler Technological Institute, Kanpur	Indian Drugs and Pharmaceuticals, Virbhadra, Rishikesh	G B Pant University of Agriculture and Technology Pantnagar
10	Govt. Agricultural Flood Research Station, Gogaghat, Distt. Bahraich	Indian Explosives Ltd., Kanpur	Industrial Toxicological Research Centre, Lucknow	Lucknow University, Lucknow
11	Govt. Agricultural Research Farm Mauranipur, Distt. Jhansi	Indian Institute of Handloom Technology, Varanasi	Institute of Ophthalmology, Aligarh	Meerut University, Meerut
12	Govt. Fruit Research Station, Basti	Indian Institute of Petroleum Technology, Dehradun	J N Medical College, Aligarh	N D University of Agriculture and Tech., Faizabad
13	Govt. Hill Fruit Research Station P.O. Ranikhat	Indian Institute of Technology, Kanpur	K G Medical College, Lucknow	Oudh University, Faizabad
14	Govt. Horticultural Research Institute, Saharanpur	Indian Photo Interpretation Institute, Dehradun	Lala Lajpat Rai Memorial Medical College	Rohel Khand University, Bareilly
15	Grain Storage Research and Training Centre, Hapur	Indian Standards Institute, Kanpur	Lalit Hari Aryuvedic College, Pilibheet	Roorkee University, Roorkee
16	Indian Agricultural Research Institute, Kanpur	Industrial Training Institute, Kanpur	Liver Diseases Research Institute, Unit, Agra	
17	Indian Forest College, Dehradun	Institute of Petroleum Exploration, Dehradun	Medical College, Gorakhpur	
18	Indian Grass Land and Fooder Research Institute, Jhansi	Institution of Engineers (India), Lucknow	Medical College, Jhansi	

19	Indian Institute of Sugar and Cane Research, Lucknow	Instruments Research and Development Establishment, Raipur, Dehradun	Mohan Homeopathic Medical College, Lucknow
20	Indian Veternary Research Institute, Hukteshwar, Kumaon, Distt. Nanital	Irrigation Research Institute, Roorkee	Moti Lal Nehru Medical College, Allahabad
21	National Botonic Gardens, Lucknow	Kamla Nehru Engineering and Technological Institute, Sultanpur	Nehru Institute of Ophthomology and Research, Sitapur
22	Post Graduate College of Animal Science, Izatnagar, Bareilly	National Institute of Hydrology, Roorkee	Post Graduate Institute of Indian Medicine, Varanasi
23	Regional Agricultural Research Station, Bareilly	Madan Mohan Malviya Engineering College, Allahabad	S N Medical College, Agra
24	Regional Research Station, Hardoi	Motilal Nehru Regional Engineering College, Allahabad	State College of Aryuvedic, Lucknow
25	Section of the Entomologists to the Govt. of U. P. Kanpur	National Sugar Institute, Kanpur	State Vaccine Institute, Patwadanagar, Naini
26	Soil Conservation Research Demonstration and Training Centre, Agra	Railway Research Design and Standard Organisation, Lucknow	Trachoma Research Centre, Aligarh
27	Soil conservrtion Resach Demonstration and Training Centre, Dehradun	Roorkee University, Roorkee	

Appendix A *contd.*

(1)	(2)	(3)	(4)	(5)
28	Sugar Cane Research Station, Shahjahanpur	School of Research and Training in Earthquake Engg., U. O. R., Roorkee		
29	U P College of Veterinary Science and Animal Husbandary, Mathura	Structural Engineering Research Centre, Roorkee		
30	Wheat Breeding Sub-station, Nanital	Textile Aerial and General Stores, Defence Research Laborary, Kanpur		
		31 U P Irrigation Research Institute, Roorkee		
		32 U P Public Works Department Research Institute, Lucknow		
		33 Uttar Pradesh State Observatory, Nanital		
		34 Water Resources Training Centre, U O R., Roorkee		
		35 Zakir Husain College of Engineering and Technology, Aligarh		

TOWARDS A NATIONAL INFORMATION SYSTEM

R THIAGARAJAN

0 INTRODUCTION

0.0 GENERAL

While the various Five Year Plans of the Government of India implemented so far have, to a large measure, attempted to build a sound industrial and agricultural base, progress in science and technology elsewhere in the world continues to grow by leaps and bounds creating a wider gulf between the advanced countries and India. Sheer economic compulsions forced on the country by escalating oil prices necessitate a new direction and orientation towards technological options based upon principles of self-reliance.

0.1 INFORMATION MUST "REACH-OUT"

In order to ensure that the weaker sections of society are provided with minimum needs in the first instance, new products and processes must reach out to the industrial establishments from research laboratories in the quickest possible time-frame. Know-how must be disseminated to the industrial workers in the shortest possible time once new products have been tested and proven in laboratories. For example, when bio-gas plants were found to be successful in a laboratory (even under controlled conditions), their utility in a real-life situation, was demonstrated soon after, resulting in adoption by the common man. This process of information dissemination should be initiated (where non-existent), sustained and promoted (where found) in order that we may improve the "Quality of life" of our people on the one hand, and ensure that we are able to hold our own in the scientific, technological, economic, industrial and other fields on the other.

0.2 Information Does Not Necessarily Mean Volume

It is an acknowledged fact that not only individuals but also nations which are "informationally" rich are "materially" rich also. By this, we do not mean that enormous quantities of data stored in unorganised and disjointed manner without relevance to the problems on hand constitute "information". Far from it. In fact, it would appear that for a country such as India with its rich heritage of statistical data, there is no dearth of data. While this is true in some cases, lack of data leads to no decisions in many others and wrong decisions in the rest.

0.3 Existing Information Scenario

It would indeed be a tall claim to state that there are no information centres in India which provide "appropriate" and "timely" information to the different segments of the population. In fact, at least in the science and technology sector, every National Research Laboratory was provided with an Information centre even at the time of its inception. But unfortunately, these centres have acted as "responsive" centres fulfilling the research needs of their own laboratory scientists. While the laboratory information centres have performed, by and large, as "in-house" centres, there are other centres such as Indian National Scientific Documentation Centre (INSDOC), Bhabha Atomic Research Centre (BARC), National Aeronautical Laboratory (NAL), Indian Institute of Science (IISc), Indian Institutes of Technology (IITs) etc. which have been serving the information needs of a larger population.

0.4 Some Lacunae

Now withstanding the existence of information centres, there appear to be some important aspects which are assuming significant dimensions in this scheme of things. That is, for a country with such diverse and complex differentials in economic and industrial growth, uncoordinated information activity will only result in unplanned-for directions. Further, there is likely to be duplication and replication of effort in information collection, storage, organisation, retrieval and dissemination activities, resulting in wasteful effort which we can ill afford, particularly when resources are scarce. Last but not the least, unless an information centre is located in such a place that meaningful feedback, evaluation, and corrective measures are achievable, the very utility of the information system would be open to question. That is, in a vast country such as India, one single national centre would not be able to cope with the informational needs and expectations of all the people. There ought to be information

centres devoted to specific sectors capable of providing "forward" information to specific segments of population.

0.5 Establishment of Nissat

Considering the above factors, the Planning Commission adopted the recommendations of the National Committee on Science and Technology (NCST) for the establishment of a National Information System for Science and Technology (NISSAT). NISSAT was formally established in May, 1977 with the launching of four sectoral centres, namely, National Information Centre for Drugs and Pharmaceuticals (NICDAP) at Central Drugs Research Institute (CDRI), Lucknow; National Information Centre for Food Science and Technology (NICEOS) at Central Food Technological Research Institute (CFTRI), Mysore; National Information Centre for Leather and Allied Industries (NICLAI) at Central Leather Research Institute (CLRI), Madras and National Information Centre for Machine Tools and Allied Products (NICMAP) at Central Machine Tool Institute (CMTI), Bangalore.

0.6 Time Opportune for a New Look

Though the above centres are still in their infancy, they have been trying to get over their teething troubles such as equipment identification, staff recuitment, document collection and, last but not the least, meeting with the information needs of the user population. The time is now appropriate to identify new sectors in harmony with the priorities laid down by the Planning Commission for socio-economic development.

0.7 Some Important Questions

It would also be worthwhile to ask questions such as :

(1) To what extent have the sectoral centres been augmented ?
(2) What is the role of an information centre ?
(3) What is the type of population expected to use the National Information System ?
(4) What are their present and future information needs likely to be ?
(5) How does information act as an important, though intangible, resource of an organisation/nation ?
(6) What is information, after all ? Is the service expected to be passive, responsive or agressive ?
(7) Why should we be concerned about a coordinated, decentralised Information System now and why not earlier ?

(8) What directions would the National Information System be taking in future, both near and far ?
(9) What are the roles of the different components of the National Information System, with particular reference to the coordinating group, likely to be ?
(10) How can the system ensure a symbiotic control mechanism ?

1.8 Scope

It is proposed to attempt answers to the above mentioned questions in this paper. The order of presentation is not necessarily in the same order of occurrence of questions.

1 WHAT IS INFORMATION ?

1.1 Information is not Data

Before any meaningful discussion on the various aspects of information systems can be attempted, it is necessary for us to understand what we really mean by the word "information". While this term has been defined on a number of occasions, it appears that adequate attention has not been paid, in various definitions, to the role played by the user. The information professional tends to uphold the view that once he has reacted to the needs of a user by providing data on some topic of the user's choice, he (the provider) has done his job. Nothing can be farther from the truth. Mostly, confusion arises from the fact that the two words, "data" and "information" are used interchangeably. "Information" can be distinguished from "data" on three counts.

1.2 Facets of Information

1.2.1 *User orientation*

Data, the basic ingredient of any information system, refers to symbols representing facts, figures and recorded observations. Thus data is cold, raw and objective. The moment we try to assign some meaning to data, it assumes a new dimension. For instance, a date may connote for some person, the date by which some action is expected to be completed, while it may mean something else to some other person. Thus *the first facet of information* (as opposed to data) relates to its *user orientation*. One is all too familiar with the confusion that is created when one assumes that Management Information and Bibliographic Information are synonymous.

1.2.2 *Association with tune*

The second facet of Information relates to its *association with time.* A piece of data may convey some meaning at some point of time while it may be of no use at all to some others. For instance, a research publication might be in great demand soon after its publication to research workers but it may not be so after the passage of some time. (Though there are some classical papers such as "On the electrodynamics of moving bodies" of Albert Einstein published in the German Scientific Journal Annalen der Physik in 1905, later known as Einstein's special theory of relativity which will be read in original for many more years to come.) Management personnel in organization, on the other hand, would insist upon timely reports.

1.2.3 *Probability with which action are taken*

The third facet of information relates to the *probability with which action are taken* by its recipient. Claude E. Shannon (1) developed a formal mathematical equation according to which, when a number of states of choice have been considered and a series of probabilities (p) of producing various alternatives emerge, the amout of information is denoted by $I = \Sigma\, pi \log_2 pi$, where pi is the probability of choosing the ith symbol/alternative of the set. Since further mathematical treatment is beyond the scope of this paper, suffice it to say that this unique characteristic of "information", namely, *action orientation,* is the one that distinguishes it from "data".

1.3 Information Defined

We are now in a position to attempt a definition of "information". Information may be defined as data which is organised and presented to a particular person at a specific point of time in order to facilitate an action to be taken (or a choice made amongst alternatives). Presentation would involve retrieval, dissemination and communication. While the above definition is true for all types of information, scientific and technological information, for obvious reasons, would differ from management information and statistical information in form, content and user population. We shall attempt a study of scientific and technological information from various angles in this paper.

2 WHY WAS THE NEED FOR A NATIONAL INFORMATION SYSTEM NOT FELT EARLIER?

2.1 General Considerations

Having built a basic theoretical framework for the definition of "informa-

tion", let us look at the reasons as to why the need for a coordinated information system at a national scale was not felt earlier and why is it being felt now? A number of factors have contributed to this state of affairs. These are :

(*a*) Advances in communications technology in the past few years;
(*b*) Progress in computer storage devices;
(*c*) Phenomenal growth in published literature;
(*d*) Awareness of and alterness to the latest consumer items as a result of spin-offs of scientific discoveries;
(*e*) Growing gap between the advanced countries and India in the fields of science and technology; and
(*f*) Escalation in the cost of publications resulting in the need for sharing of resources.

2.2 Growth in Published Literature

In a study conducted by Derek de Solla Price[2] it has been estimated that scientific and technological literature doubles every ten years. This is borne out by the actual number of articles published in the various scientific journals as shown in Table I. Essentially, new journals tend to get started, catering for finer and finer subdivisions of the whole field of knowledge. In such an eventuality, it becomes difficult to keep pace with secondary publications let alone primary journals. Therefore, Selective Dissemination of Information (SDI) originally propounded by Hans Peter Luhn[3] has come to stay. Computers are being used increasingly for keeping scientists and technologists informed about the articles appearing in their chosen fields of interest.

2.3 Stock of Scientists and Technolgoists and Their Output

As can be seen from Table 2, India with a population of about 12.5 million scientists and technologists ought to be generating more original scientific thought and discoveries. This does not mean that mere numbers alone would dictate scientific output. The quality of scientists and technologists has, however, been vouchsafed by the underground atomic explosion at Pokharan in 1974 and the launching of a satellite (Rohini) in 1980. Notwithstanding the above achievement, some commonly applied indicators of performance of scientific and technological personnel are : number of books written in their respective vocation by scientists Table 3; number of scientific papers published in India Table 5; Let us now look at some of them critically.

2.4 Support from Libraries

One of the important considerations to be taken into account while trying to

motivate scientists and technologists towards greater endeavour in their research is the provision of books, periodicals and other publications. Such a service ought to be *timely*, and provide as exhaustive a coverage as possible. Lack of enterprise on the part of a scientist seeking out research projects in unconventional areas could perhaps be attributed to the absence of the right degree of motivation. Such motivation could be kindled by apprising the scientists about achievements of their peers elsewhere in the world. When engaged in this process, one should not lose sight of the fact that while patron preference may be known to an information professional based upon the farmer's past research activities, looking for unchalked out and unexplored areas, and acquiring supporting literature pose problems of an entirely new character.

2.5 Must Spend More on Acquisitions

From a perusal of Table 4, it would appear that advanced countries have accorded a pride of place for libraries, and, are enriching themselves with further collections every year. For instance, while USA can boast of 407 million collections, with an annual addition of 25 million publications, India has only 11 million collections with an annual increase of 0.7 million. India's total stock does not even reach the 50 per cent mark of the annuala dditions to US stock. Another factor worth noting amongst advanced countries is the fact that not only do they acquire a large number of collections, but they loan them out to a large number of borrowers also.

2.6 Output From Scientists

A useful measure of an information service for scientists and technologists may be ascertained from its ability to provoke its patron population to produce works of its own. Accordingly, the next indicator of an information service could be an analysis of the number of books published in a specific branch or discipline. Table 2 gives a comparative statement of the number of books published in applied sciences, pure sciences and social sciences. The figures quoted cannot be taken as figures of merit in their entirety because of the fact that books published could be reprints or cheaper edition of works of foreign authors. However, it could be seen that notwithstanding the actual number of scientists and technologists resident in a country, advanced countries produce and publish books in scientific subjects at a rate of 6000-10000 per year.

2.7 Scientific Papers and Associations

Another factor that provides an insight into the need for a Natioual Infor-

mation System relates to the number of scholarly papers published in conferences and seminars. A national system is considered necessary mainly because of the fact that independent, and free-floating information centres are not able to cope with the identification and; later dissemination of information with regard to activities in subjects of an inter-disciplinary nature, which has become a common feature nowadays. The number of publications in India seems to fall far short of the world standards. In a group of 23 laboratories in India, it was noticed that the number of papers published in 1974 was 957 while it dropped to 798 in 1976. One of the factors for this reduction in intellectual output, though not rigorously supported, could be the non-availability of scientific publications to the scientists at the appropriate time.

2.8 Information is not Confined to Science and Technology Alone

The foregoing discussion has been confined, by and large, to an environment prevalent amongst the scientific and technological community. But when we design an information system at the national scale, one will have to take cognizence of the other systems such as Management Information for the government, numerical and experimental results for the scientists, and, statistical information for the planners.

3 HOW TO NUCLEATE A NATIONAL INFORMATION SYSTEM?

3.1 Existing Mixture of a Centres not a System

As stated a elsewhere, a number of information centres have been established in India from time to time. But, unfortunately, these centres have not evolved a system by which monitoring of their services; establishment of some norms in the initial stages itself; comparison of performance against predetermined norms; evaluation and last but not the least, adoption of corrective measures were "in-built" mechanisms.

3.2 Characteristics of Information

Information products and services, by their very nature do not display tangible results and, therefore, no tangible benefits appear to accrue. No attempt is being made to find excuses for the absence of effective control mechanisms information centre management. Further, information products (majority of them at least) can be shared by more than one person as opposed to consumer goods which essentially are not normally shared. Another aspect relates to the fact that information may repetitively be used by different persons without any loss to the accuracy of the original core, that is, data. Information can also

be generated afresh (or renewed after lapse of quite sometime) from historical data.

3.3 Centralisation Versus Decentralisation

While every attempt should be made to provide concentrated information from a central agency, (in many cases, remote from the place where it is in demand), experience has shown that the best place where an information centre can be situated is one where maximum feedback and interaction is possible. Otherwise, even if the centre were manned by highly competent professionals in a central location, for want of inter-personal contact and effective feedback, such a system could not endure long. It is in this context that that the Planning Commission has approved of NISSAT project as a decentralised network of information centres controlled by a coordinating group at the Department of Science and Technology.

3.4 Tasks of the Coordination Group

The coordinating group, per force, will have to ensure that uniform standards of services are maintained throughout the network to the extent possible. This could be achieved, by and large, through (1) extensive and intensive training programmes for information personnel at different places in India; (2) periodic visits to some of the important information centres within the country and abroad for at least the information centre managers; (3) conduct of workshops, seminars, etc. for information centre personnel; (4) promotion of indi genous teehnology in the field of information; (5) important substitution. Let us take a look at each of these one by one.

3.5 Manpower Development Programmes

NISSAT has oriented a number of courses in emerging areas of information science and technology on an All-India basis. Such courses have become necessary because of the fact that support to sectoral centres in the form of sophisticated equipment would be a self-defeating exercise if the skills of information professionals were not updated on a continuing basis, Further information science and technology is emerging as in inter-disciplinary phenomenon encompassing such diverse fields as library science, reprography, telecommunications, computer storage techniques, dissemination skills and so on. As yet, there is no course offered by any of the institutions in India. Even if they are offered in one or two institutions, they are addressed to raw entrants to the profession and last for a year or two. Bur the practising professionals cannot possibly be spared by their parent organizations for such a long duration. And

hence, short term course, lasting not more than 2 to 3 weeks have been conducted by NISSAT and they are found to be very popular.

It is proposed to continue conducting training courses in India in different subjects falling under the generic name of information science and technology such as reprography, indexing techniques, scientific and technological translation, computer applications etc. at the rate of 5 courses per year. It is also proposed to organize seminars and workshops which would last for not more than a week and expose the practising professionals to new techniques in a workshop mode of education. Seminars have been conducted in the past such as the Indo-U.S. seminar on "Scientific and Technological Information"; seminar on "Library Buildings in India" and so on and have been found to be very useful.

The capability built by the NISSAT group can be gauged from the fact that Unesco requested the group in DST to conduct a training course on "Management Techniques" to information centre managers of the South and Central Asia Region of Unesco. Unesco has also requested the group to organize a seminar on "Information on Research in Progress" in India in 1983.

3.6 Publications

There is no gainsaying the fact that training courses, seminars, workshops etc. must be complemented by appropriate publications. Even in the absence of manpower development programmes, publications highlighting the state-of-art in information science and technology are very essential. It is with this aim in view that lecture notes Directory of Forthcoming Conferences, NISSAT Newsletter etc. are being published regularly by the DST. It is proposed to continue these activities in future also.

3.7 Document Collection

If the existing sectoral information centres of NISSAT are to continue rendering information services on a national scale, they must be provided with appropriate funds for acquiring documents relevant to their respective sectoral areas. It will be seen from Appendix that the cost of publications has increased many-fold, in some cases fifteen times in 1981 as compared to the cost in 1971, that such support is crucial to the service provided by sectoral centres.

3.8 Equipment Acquisition

An information centre to the present times must be equipped with sophisticated instruments and devices in order that it may fulfil its functions in an

efficient and effective manner. The four sectoral centres which the present paper attempts to cover, have already been provided with simple reprographic equipment. But what is now necessary is the provision of computing devices for the quick storage and retrieval of references, long distance zerox equipment for transmission of textual matter over distances text-processing devices, microform preparation equipment etc.

3.9 Futuristic Experiments

It has been observed the world over that the decade of the Eighties and perhaps the Nineties would witness the ushering in partially of a "Paper-less" society. If such a society does come about (and present indications are very strong in that direction), India should be prepared to face the metamorphosis with confidence. With this aim in view, the NISSAT group in DST has seized opportunities in the conduct of the following experiments :

(*a*) *Use of analogue type indigenously produced facsimile equipment.* Experiments were conducted in an intra-city mode in Bangalore using analogue type facsimile equipment manufactured in India.

(*b*) *Teleconference facility.* On two distinct occasions, both at the specific request of the National Science Formation of US, the NISSAT group participated in an audiographic conference on a worldwide basis. It is a unique privilege conferred on India when it was chosen as one of the participating countries (the only developing country in the Group) in the two conferences. It also speaks highly of the confidence reposed by advanced countries in the technical capability available with the NISSAT group in handling sophisticated environments. These conferences would remain only at the audio level unless supported by an electronic blackboard and slow-scan Television.

(*c*) *On-line access of databases.* DSI has been supporting experiments devoted to access of database resident in computers in remote locations since 1976. In 1981, another experiment proved that it was possible to get access to international databases, wherever the query terminal were to be located (Bangalore where there was no earth station and had to make use of Arvi earth station, or, at Delhi). The NISSAT group of DST has supported the National Aeronautical Laboratory (NAL) to access databases resident in the European Space Agency (ESA) computer at Frascati, Rome on an off-line basis for nearly 3 years. Such experiments would now have to provided on a commercial basis and must be based on the channels provided by the Indian Satellites.

Subsequent of the successful experiments conducted in accessing international databases, one of the information centres in the country namely, Technical Information Centre at BHEL corporate R & D Division has been accessing the DIALOGUE system at California in on-line mode since May 1982. The access is being made using international telex network. This access has been achieved on the initiative of BHEL authorities. The average on-line telex-search cost is Rs. 910/- (a search of about 15 minutes connect time with an output of 175 items). This cost is comparable to the cost paid by BHEL in the past to the agencies such as IEE, ASM etc. for doing their searches.

Thogh BHEL has been able to create a landmark in providing fast access to international information, it is now necessary to expand these activities to other subject disciplines also. This is where the contribution of NISSAT would be meanigful. It is envisaged that NISSAT would be able to provide online access to such international databases during the 6th Five Year Plan itself.

3.10 Prerequisites of the National Information System

The essential prerequisites of the national information system should be the following :

good communication facilities linking the users to the network of information centres and inter-linking within the network;
more effective use of existing telecommunication facilities and developing new communication facilities for efficient operation of the system;
support for scientific publication activities, including the establishment of a national science press;
information resources (libraries, documentation centres, etc.) with adequate collection of all types of documents;
facilities for training in library and information sciences and communication;
good organisational system using modern management techniques and financial procedures;
standradisation in materials, techniques and patterns of service.

3.11 Kinds of Information

The National Information System should take into account the need for different kinds of information. Scientific information, techno-economic information and management information are all appropriate to the needs of a technologically advancing nation. The aim of scientific information is to provide information for scientific research. Techno-economic information is to provide information for development, production and other economic activi-

ties. Management information is to provide planners, administrators and all those engaged in management of R & D, information relevant to policy framing and decision making. It is obvious that these three spheres of information are not identical. But they interact with each other in many respects and have close links. For supporting scientific and industrial development of a country, each one of them has its importanse. The National Information System should, therefore, provide for serving all the above kinds of information.

4 CONCLUSION

This paper has attempted to give an overview of various facets of a National Information System. Establishment of a closely-coupled information system in a country such as India with its diverse socio-economic, educational and cultural milieu, would of necessity be a long-drawn out process. Nevertheless, given the will of the professional community, it would be possible to establish a network even in a laissez-faire mode.

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TABLE 1 : WORLD OUTPUT OF SCIENTIFIC & TECHNICAL ARTICLES IN PERIODICALS

Subjects	*Approximate number of articles*		
	1960	*1970 (estimated)*	*1980 (estimated)*
Mathematics	15,000	30,000	50,000
Physics	75,000	1,55,000	2,30,000
Engineering	1,55,000	2,75,000	
Civil	15,000	15,000	30,000
Mechanical	10,000	20,000	40,000
Electrical and Electronics	80,000	1,50,000	4,00,000
Aerospace	35,000	75,000	1,50,000
Industrial	15,000	15,000	30,000
Chemistry	1,50,000	2,90,000	5,00,000
Metallurgy	35,000	50,000	1,00,000
Biology	1,50,000	2,60,000	4,00,000
Geoscience	91,000	1,58,000	4,00,000
Agriculture	1,50,000	2,60,000	5,00,000
Medicine	2,20,000	3,90,000	6,00,000
Psychology	15,000	30,000	50,000
Other subjects	9,29,000	18,82,000	25,00,000
TOTAL :	19,85.000	37,80,000	59,00,000

TABLE 2 : POPULATION, AREA, AND POPULATION DENSITY

S No	*Name of Country*	*Year*	*Geographical area in square kms*	*Population in thousands*	*Population Density (per sq km)*	*Remarks*
1	*2*	*3*	*4*	*5*	*6*	*7*
1	Afghanistan	1975	647,497	19,280	30	Source :
2	Bangladesh	,,	143,998	76,815	533	Unesco
3	Burma	,,	676,552	31,240	46	Statistical
4	India	,,	3,287,590	5,98,097	182	Year Book
5	Iran	,,	1,648,000	33,019	20	1979
6	Mongolia	,,	1,565,000	1,444	1	
7	Nepal	,,	140,797	12,572	89	
8	Pakistan	,,	803,943	70,260	87	
9	Sri Lanka	,,	65,610	13,986	213	
10	U S A	,,	9,363,123	1,13,611	23	
11	U K	,,	244,046	55,962	229	
12	France	,,	547,026	52,786	96	
13	U S S R	,,	22,402,200	2,54,382	11	
14	Federal Republic of Germany	,,	248,577	61,832	249	
15	Japan	,,	372,313	1,10,953	298	

TABLE 3 : OUTPUT OF BOOKS

S No	Country	Year	Books on Pure Sciences		Books on Applied Sciences		Books on Social Sciences	
			Number	Number of copies (000)	Number	Number of copies (000)	Number	Number of copies (000)
1	Afghanistan	1973	7	131	5	236	NA	NA
1	Bangladesh	1973	34	168	43	159	57	472
3	Burma	1975	13	116	60	230	70	459
4	India	1972	532	412	874	946	4245	1762
5	Iran	1972	206	NA	477	NA	684	NA
6	Mongolia	1972	27	526	117	455	171	684
7	Nepal	—	11	NA	32	NA	28	NA
8	Pakistan	1973	37	NA	91	NA	213	NA
9	Sri Lanka	1972	43	235	118	383	424	1768
10	France	1971	1594	NA	4863	NA	5320	NA
11	Federal Republic of Germany	1973	2601	NA	5159	NA	11320	NA
12	Japan	1974	1672	NA	8441	NA	9911	NA
13	U K	1969	3622	NA	5694	NA	6622	NA
14	U S A	1973	2845	NA	6004	NA	8899	NA
15	U S S R	1973	7312	1,59,805	32,534	2,86,952	19,151	2,89,562

TABLE 4 : LIBRARIES IN INSTITUTIONS OF HIGHER LEARNING—A STATUS

S No	Name of Country	Year	Number of Libraries	Number of Registered Borrowers	Collection Number of volumes (000)	Number of Collections loaned out (000)	Remarks
1	Afghanistan	NA	NA	NA	NA	NA	
2	Bangladesh	,,	,,	,,	,,	,,	
3	Burma	1971	17	27,826	353(32)	408	* Figures in
4	India	1977	93	NA	12536(707)	4833	brackets
5	Iran	NA	NA	NA	NA	NA	indicate
6	Mongolia	NA	NA	NA	NA	NA	annual
7	Nepal	1972	1	NA	74	—	additions
8	Pakistan	NA	NA	NA	—	—	
9	Sri Lanka	1974	5	NA	624(16)	240	* Source
10	France	1971	—	—	—	—	Unesco
11	FRG	1974	4185	4.5	86000(1.4)	8.3	Statistical
12	Japan	1974	1299	1957	82391(4748)	11347	Year Book
13	UK	NA	—	—	—	—	1970 and
14	USA	1972	3421	—	406790	—	1981
15	USSR	1974	—	—	(25095)	—	

TABLE 5: INDIAN SCIENTIFIC SOCIETIES AND THEIR PUBLICATIONS

1	Total number of societies	—	341	(Medical 75, Engineering 44, Biological Sciences 38)
2	Number of Societies Publishing Journals		293	
3	Total number of journals	—	315	(10 in regional languages)
4	Journals with the largest frequencies :			
	(*a*) Monthly	—	51	
	(*b*) Quarterly	—	56	
	(*c*) Half-yearly	—	57	
5	Field with the largest number of journals :			
	(*a*) Subject	—	Medicine	
	(*b* Number	—	63	
6	Oldest Journals—Journal of the Asiatic Society, Calcutta, started in 1834.			
7	Coverage in secondary periodicals			
	(*a*) Indian Science Abstracts	—	145	
	(*b*) Physics Abssracts	—	one journal in toto; 49 selectively.	
	(*c*) Science citation Index	—	8	
	(*d*) Current contents	—	28	
	(*e*) Index Medicines	—	12	

Source : Seminar on Primary Communications in Science & Technology in India, DRTC, Bangalore, December 1978.

TABLE 6: SECTORS DEFINED IN SCIENCE AND TECHNOLOGY PLAN

1 Natural Resources:
   (i) Forest
   (ii) Minerals
   (iii) Oil and Natural Gas
   (iv) Surface water
   (v) Ground water
   (vi) Geodetic and topographic
   (vii) Earth Sciences
2 Marine Resources
3 Meteorology
4 Fuel and Power
5 Steel, Mines and Metallurgical industries
6 Special Materials
7 Machine Tools
8 Heavy Engineering
9 Chemical Industries
10 Consumer Industries
11 Khadi and Village Industries
12 Recycling of Wastes
13 Housing, Urbanisation and Construction Technology
14 Family Welfare and Health
14 Transport
16 Research support, Extension and Education
17 Information
18 Environmental quality & Production Control
19 Agriculture
20 Atomic Energy
21 Space
22 Electronics

A DEVELOPING SOCIETY AND ITS LIBRARY NEEDS

G L TREHAN

1 A SOCIETY

A society is composed of a diverse variety of individuals and groups in a community. The society consists of a very wide range of people from various vocations, age, sex, social order, urban and rural areas. Different groups of people in the society have varied interests in knowledge, representing various subjects to satisfy their needs of varying nature. In developing countries like India, the trend is towards a socialistic pattern of society in which even the poorest in the community should have the same facilities for acquiring knowledge as the richest.

2 UNIVERSAL BOOK SERVICE : A SOCIAL NECESSITY

There is impact on society of sociological thought, political thought, industrialization, spread of universal education and creation and production of books in abundance. Current thought in sociology is breaking down the social barriers created in the past by aristocracy of birth of wealth, intellect or occupation, or political power and there is trend towards socialistic pattern of society and a welfare state which will provide equal rights to all for free book service. The social force from universal education makes universal book service a social necessity to prevent national wastage due to relapse into illiteracy at one end and at the other end to provide facilities for life long adult education by self education.[1] As such, a public library must provide the freedom to each citizen to read and to think as he may decide for himself about any subject he chooses.[2]

3 A DEVELOPING SOCIETY AND NEED FOR LIBRARIES

One of the means of self-education and information is library which provi-

des recorded knowledge for use of members of the library. The knowledge is for human benefaction i.e. for a better social order, political order, economic order and for all that is essential for the prosperity and happiness of man and society.

In a modern society, besides fulfilling the three necessities of a civilized society, viz. food, clothes and a house, "feeding the intellectual hunger of each citizen and providing him with the information, relevant to his profession. health, hapiness and prosperity, are the subjects which amount to the success or failure of democracy and well being of the nation in work," and, as such, intellectuals or non-intellectuals all require relevant information for the sake of efficiency and growth of national production. We, therefore, need public libraries "to circulate reading materials and serve the citizens of democratic India so as to give them relevant reading materials for their inspiration, relaxation, information and for various other social purposes viz., to meet population pressure and social maladies and to make the best use of leisure."[3] The purpose of the public library, in a modern society, is to educate the community in the wider sense. In short, the public library should readily cater to the demand of community's needs and become a place for consumption or use of reading material.

4 THE LIBRARIAN'S CONCERN

The library is an agency for disseminationg knowledge contained in a collection of books and other documents organised for use. The librarian concerns himself with the knowledge he communicates and the importance of knowledge to both an individual and to society and the environment in which communication takes place. The library work is primarily a social service. Its social role is performed by the librarian who acts as a mediator between the book and the reader through personal service. The librarian organises the recorded knowledge or reading material or even non-book material and makes them available or disseminates to every member of the community for use. In this way, a reader who studies the subject of his vocation enriches his own professional knowledge or vocational skill and contributes to the welfare of the society as well as of humanity as a whole.

5 INFORMATION ROLE OF THE LIBRARY AND THE LIBRARIAN

The basic function of a library is education. The purpose of a library in modern society is to educate the community in the wider sense. Dissemination of knowledge and incessant search for new knowledge through library is necessary to satisfy the occupational needs of our society. For example, the day-to-day contact with latest developments and techniques through the

study of literature available in the library in the field of agriculture helps a person to become a good farmer or a horticulturist, increase his yield of crop and enrich his own life and that of his family. This study also helps the society to overcome the food problem.[4] The librarian has something common with the editor of a newspaper rather than with a school teacher. He must acquire recorded knowledge that is worthwhile, useful and significant to the specific community he serves. A library is a kind of a meadow where the thinker can graze amid grasses that have been selected not without any viewpoint in mind but just generally because of their quality. The information role of the library is important in the present age which needs, above all, facts and information. It is the job of the librarian working in a public library to provide facts which are food for mind that make men and women think for themselves. The job of the librarian is a part of the communication process (like the modern radio, the press, and the television). In this view of the matter, the librarian is an agent of communication in modern society and doles out information for the benefit of the community served by the library.

6 ROLE OF BOOKS IN THE QUALITY OF LIFE OF SOCIETY

Article 1 of the Charter of the Book approved at Brussels on October 22, 1971, by an International Committee states, "Society has an obligation to ensure that every one has an opportunity to enjoy the benefit of reading", Article 2 thereof states, "Books are essential to education." These two articles are most relevant to developing countries like India for implementing reading programmes. For expanding school and college enrolment, adequate quality textbooks and general books are needed. Article 3 of that charter says, "Society has a special obligation to establish the conditions in which authors can exercise their creative role". These declarations show that the state must provide good means for book production and adequate facilities for reading of books through libraries and also encourage creative writing by good authors to turn out worthwhile literature for the good of the society. As books are containers of knowledge, the librarian must carry knowledge contained in good books to the masses with a view to improving the quality of life of the society.

7 SOCIAL FUNCTIONS OF THE LIBRARY AND LIBRARIANSHIP

The library plays sociological part in different culture stages and as a social institution, the function of books and libraries in contemporary author-patterns is to help in reading and personality development.[5] Libraries are the power houses where ideas in printed language are kept ready for use. Whole knowledge is now stored in books and periadicals and there is no other complete store

house. Articles 7 and 8 of the charter of the Book, which concern libraries and documentation services, state "Libraries are national resources for the transfer of information and knowledge, for the employment of wisdom and beauty . . . Documentation serves books by preserving and making available essential background material." In view of above considerations, development of library and documentation services are necessary for the distribution of books, the promotion of reading habits, the introduction of life long education and for bringing about economic, social and cultural progress of the society. A library becomes potential force in the social and cultural life of a community if it is serviced by trained and alert staff. In this context, Dr. Jesse H. Shera says :

> A library is a tripartite unity of interrelated activities; it is not just a collection of books—not even of classified and catalogued books. 'Books are for use' wrote S. R. Ranganathan, in his 'Five Laws of Library Science', and he amplified that assertion by declaring that every reader should have his book; and every book its reader. But, however, effective the librarian's technology may be, not every reader can find the book he wants, or that minute part of the book that he needs, which is why we have reference librarians. They are the ones who give the library its social role.[6]

Library is a vital centre. It must go into society and society must reach it through excellent cooperation between the librarian and all strata of society. Dr. Shera depicts the unique function of the librarianship as under :

> The true essence of librarianship, if you will, is the maximazation of the effective use of graphic record for any purpose that contributes to the dignity, beauty and strength of human endeavour as all the activities of the society come to depend on an ever increasing extent upon all forms of secondary communication and particularly on graphic records. The library profession must interact even more closely with a diverse variety of those individuals and groups of which society is composed. Only through a clear and constant recognition of his own unique responsibility can the librarian hope to maintain unity, the integrity and effectiveness of the service.[7]

The function of the library in society is to maximize the social utility of graphic records for the benefit of the individual, and through the individual the improvement of society. As such, the librarian must concern himself with the knowledge he communicates, its relevance to the individual user, its importance to society, and the enviroment in which communication takes place. In short, the librarian must know not only how to perform his role, but why the role is to be performed and the extent to which he can meet society's demands-he must see librarianship clearly and see it whole. Dr. Shera further says ;

To bring man and book together in a fruitful relationship for the benefit of individual, and through individual to society, and to do in an environment hospitable to serious meditation : that is our task—either with or without the benefit of electronic gadgetry; to carry the light as best as we can, even though it may be no more than a candle in the window that proclaims the library as a storage place for the memory of the human race, a place for the soft rustle of pages and the quiet stir of thought.[8]

8 LIBRARIAN'S ROLE IN THE COMMUNICATION PROCESS

Though the library serves mainly the individual, yet the ultimate objective is the betterment of society. The librarian must, therefore, know not only the cognitive system of the individual, but also the communication network. The communication process is a duality of system and message of that which is transmitted as well as the manner of its transmission. The librarian must view his role in the communication network as being more than a link in a chain, or even a switching centre in a network. He must also concern himself with the knowledge he communicates and the importance of that knowledge to both the individual and to society. In this context, Dr. Jesse Shera observes :

If the librarian's bibliographic and information system are to be structured to conform as closely as possible to man's uses of recorded knowledge, the theoretical foundations of his professional activity must take into account—the problem of cognition—how man knows, and also the problem of social cognition—how society knows, and the nature of the socio-psychological system by means of which personal knowledge becomes social knowledge *i.e.* the knowledge possessed by a society.[9]

9 LIBRARIAN'S SOCIAL RESPONSIBILITY IN MANAGEMENT OF THE LIBRARY

The librarian has a great social responsibility for efficient and effective management of the library. In this context, Dr. Shera says :

The librarian's responsibility is the efficient and effective management of the transcript, the graphic record of all that society knows about itself and the world on which the self lives. His responsibility which includes the social organism he has learnt, its values as well as its facts, its imagery as well as its reality. The librarian is at once historical, contemporary and anticipatory. Thus, he can carry out his social responsibility with maximum effectiveness only when he understands the cognitive process in society as well as in the individual and can translate that understanding into service.[10]

The librarian's role in both the science and the arts is that he is not simply to supply information in response to a particular request or to make available material for those who require it or to fill in gaps but also to provide the connection. If he develops this role, he will become increasingly important as an integrating agent.

10 NEW CONCEPT OF A PUBLIC LIBRARY

In the modern age the public library has become a community centre for social recreational and cultural activities, where all classes of people, rich or poor, high or low, congregate and enjoy the functions arranged for the purpose. In this context, B. S. Kesavan observes as under :

> Library is no longer a passing institution, but a dynamic institution and it has become an integral part of society. This concept has changed the nature of library and also the concept of library architecture. Library is now a place where one is completely at home, where the entire family comes alongwith the laughter of children for the enjoyment of life. Unless the libraries are built in beautiful surroundings, they cannot perform effective service in the matter of attracting readers to activate their minds.[12]

This basic concept of library has led Dr. M. S. Randhawa, a man of vision and a great patron of libraries in India, to remark at the inaugural function of the golden jubilee of the Punjab Library Association on December 25, 1966 at Chandigarh : "The age of Mandirs, Gurdwaras and Churches is gone and the present is the time of temples of knowledge of which librarians are the priests."[13] This concept of a public library as "temple of knowledge" will certainly help towards complete socialization and secularization of the public library, where people of all religions, castes and creeds will congregate and gain knowledge by getting *prasad* of good reading material for the welfare of the society through '*Gyan Yajna*' (act of disseminating knowledge performed by the library staff).

11 TRANSFER OF INFORMATION TO SOCIETY THROUGH LIBRARIES

A library is now not only a book issuing agency but it is also a social institution catering to the informational, inspirational, investigational and recreational requirements of peoples of various interests and tastes using the library. The library users' ardent quest for knowledge has to be satisfied by providing easy access to stacks and consultation of reference books and documents freely and frequently. A modern library must also effectively render for the users not only lending and reading room service but also reference service, information service, and other services, such as reprographic, documentation, abstract-

ing, translation and other bibliographical services including inter-library loan. In short, the aim of the library is to bring a book or a document to a reader and to lead a reader to a book or a document.

The application of science has rapidly changed the society. Research in economic and social development of a country is as much necessary as research in science and technology so that the country evolves an egalitarian pattern of society. New methods have been devised for dissemination and transfer of information namely: (i) Reporting of articles, (ii) Abstracting and indexing of articles published in periodicals, (iii) Press cutting service, (iv) Facts on file system, as well as information storage and retrieval which involve documentation work. Current issues of periodicals provide opportunities for the reference librarian to keep himself abreast of the world's progress in knowledge, with a view to recognise the needs of the clientele and to make the same available for use[14]. As rightly said by Foskett, through our reference and reader service we make these records *available* to enhance the quality of life even more; the life of individuals, the life of society, the life of humanity.[15]

12 CONCLUSION

In view of above stated library needs of a developing society, it is high time that the government should establish a network of integrated public library system, both in urban and rural area for dissemination of knowledge and information to the masses so as to bring nearer the goal of socialistic pattern of society in India. The sooner it is done the better, for a 'Nation that reads is a Nation that leads.' Social good of one and all is a much needed desideratum.

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ADULT EDUCATION AND PUBLIC LIBRARIES

VIRENDRA TRIPATHI

1 BACKGROUND

For centuries, the masses have been habituated to adjust their lives with the handicap of illiteracy and so they have not shown any signs of eagerness to remove this handicap. This perpetual handicap created many blocks on the path to socio-economic development. The existing formal education programmes in the country did not produce the desired results in respect of eradicating illiteracy, and enabling the masses to combat their problems and participate effectively in the country's development programmes. Inspite of unprecendented expansion of educational facilities during the past three decades, still there are more than 400 million illiterates in the country. This has created the need for a fresh look on our present educational system. It was felt that there is a need for a broad based adult education programme which could create a new environment and act as an impetus for the masses to remove the handicap of illiteracy. The new adult education programme has been conceived in this background. The new system also known as 'Nonformal Education' is an out-of-school educational programme which exposes its participants to a process of continuous lifelong learning and attempts at making them functionally capable of solving their own problems.

2 THE NEW EDUCATIONAL STRATEGY

The Sixth Five Year Plan's educational strategy is built on the following assumptions :

(*a*) Formal and non-formal education should be correlated and integrated with each other, since in a country like India with enormous educational needs, formal education through full-time schooling alone cannot, by itself, be sufficient for the achievement of major educational objectives.

(*b*) Programmes of nonformal education will be developed for all categories of learners—children, youth and adults from elementary to higher education.

(*c*) Every child in the age-group 6-14 shall continue to learn, on a full-time basis, if possible, on a part-time basis; if necessary. In other words. there will be no drop-outs, and if necessary a child can change his channel of education from full-time to part-time according to his needs or convenience.

(*d*) The twin programmes of adult education (for 15-35 age-group) and nonformal education (for 6-14 age-group) will be organised simultaneously. These two programmes will strengthen and support each other and steps will be taken to coordinate them in all ways possibie and at all stages.

Till recently, adult education and nonformal education programmes were limited to the imparting of basic literacy skills and eradication of illiteracy. In the new educational strategy these programmes have been designed to help in greater productivity and earning capacity of the people. A variety of programmes for specific target groups are being organised by the state governments and voluntary organisations both in rural and urban areas. These programmes can be divided into five broad categories :

(*a*) Programmes with emphasis on removal of educational deficiencies functional literacy classes, reading promotion programmes, nonformal education centres, libraries, etc.

(*b*) Programmes with emphasis on skills development-handicrafts and home industries (basket making, embriodery), industrial skills (mechanical skills, lathing, metal work) and occupational skills (typing, radio and television repairing; accounting), etc.

(*c*) Programmes with emphasis on agriculturc and related issues—modern agriculture, vegetable and fruit gardening, animal husbandary, fisheries, etc.

(*d*) Programmes with emphasis on health and promoting community leadership, nutrition education, food preservation, child-care, environmental sanitation, first-aid, youth organisations, community organisation; and

(*e*) Programmes with emphasis on continuing education—general and vocational education, correspondence education, libraries and reading rooms, documentation services, etc.

3 ADULT EDUCATION PROGRAMME

Based on the Policy Statement on Adult Education (1977), a massive programme of adult education to cover 100 million illiterate masses (both men and

women) in the age-group 15-35 was launched on October 2, 1978. It is based on the following assumptions :

— that illiteracy is a serious impediment to an individual's growth and to a country's socio-economic progress;
— that education is not co-terminus with schooling but takes place in all work and life situations;
— that learning, working and living are inseparable and each acquires a meaning only when correlated with the others;
— that the means by which people are involved in the process of development are at least as important as the ends; and
— that illiterate and the poor can rise to their own liberation through literacy, dialogue and action.

3.1 Objectives

The main objectives of the programme are :

(*a*) to reduce the incidence of illiteracy among adults in the age-group 15-35;
(*b*) to bring about functional improvement in their social and economic vocations;
(*c*) to create awareness about facilities available in new development schemes and against the social and economic exploitation; and
(*d*) to utilise the new wave of enthusiasm and expectations emerged through adult education programmes for planned group action to remove the social and economic handicaps among which these masses are living.

3.2 Special Programmes

In addition to organising a massive programme for adult illiterates special programmes for specific groups based on their special needs are also provided. These programmes are for : urban workers, government functionaries, employees of commercial establishments and house-wives. Programmes for these and several other categories of persons are organised through class room participation, correspondence courses, mass media, or by a combination of all these. In all these programmes highest priority is being given to women and persons belonging to the economically and socially deprived sections of the society.

The Policy Statement implies creation and development of a resource base for adult education programmes. The resource base includes : preparation of diversified and need based learning materials, training of functionaries, establishment of State Resource Centres and Directorate of Adult Education, systematic monitoring, evaluation and follow-up services.

The programme is implemented in the form of a compact project. By and large, the area of a project is co-terminus with one Community Development Block comprising of about 100 villages. However, there could be smaller projects in part of a block, as well as large projects which could cover upto two blocks. The number of adult education centres in each project ranges from 30 to 300. The project is headed by a Project Officer and there is a supervisor for each group of 20-30 adult education centres. The actual adult education activities are organised through adult education centres set up at the village level. The locally available educated youth, school teachers, students, social workers serve as instructors in these centees. The instructor is paid an honorarium of Rs. 50.00 per month. The duration of the adult education course is about 300 hours, spread over a period of 9 to 10 months. The perspective of life long learning has been kept in view and provisions for follow-up and continuing education programmes have been made from the beginning of the programme.

The programme of such a vast dimension cannont be executed successfully by government functionaries alone. Hence, in its implementation active support from all quarters including highly placed functionaries of different departments and private organisations, social workers, voluntary agencies, trade unions, educational institutions, Nehru Yuvak Kendra, universities, etc. is being sought.

It is for the first time, that adult education programmes are being attempted on such a vast scale with the political will, large scale resources and elaborate planning. These new dimensions make adult education programme quite different from selective or the stray attempts of the past in the fieid of adult education.

4 POST-LITERACY ACTIVITIES

The committee on post-literacy and follow-up programmes set-up by the National Board of Adult Education mentioned that neglect of post-literacy and follow-up programmes can be perilous. The past experiences in our country show that although awareness regarding the importance of post-literacy programmes was not lacking but they were seldom systematically organised. This has been one of the most important reasons for thc rather limited impact of the adult education programmes taken up in the past. The post-literacy programmes, therefore, should be given as much importance as the regular adult education activity itself otherwise all efforts will go waste and people will relapse into illiteracy.

The concept of post-literacy activities during the last decade has considerably changed. The post-literacy activities were originally conceived as a set of supplementary and follow-up measures for reinforcing literacy and numeracy skills, gained in adult education centres, so that a neo-literate person does not relapse into illiteracy. Now there is a distinct shift from mere literacy retention activi-

ties to the continuity of the learning process after reading and writing skills have been acquired. Seen in this way, post-literacy activities become a means for putting into practice the theory of life-long education by enabling the neo-literates to use his skills, add to the knowledge acquired in the preceeding phases and embark on the acquisition of new knowledge and skills through a continuing process of further learning and greater mastery of his environment.

5 ROLE OF PUBLIC LIBRARIES

Viewed from this expanded concept of post-literacy activities, the Public Library System plays a positive role in the retention of literacy, spread of knowledge and promotion of self-education. The role of libraries from mere repositories of books has to be changed to that of creating reading habit, organising continuing education programmes and catering to the needs of even those who do not come to their portals. In the past the public library system mainly served the comparatively well-of sections of the society. This trend will have to be effectively countered. Besides, persons belonging to scheduled castes, scheduled tribes and women suffer from handicaps in availing library facilities. Special arrangements shall have to be made for them.

The states in which library legislations has been enforced are in a better position. Adequate funds are provided for meeting expenses of the administrative structure and effective functioning of the libraries. The libraries in these states act as a community cultural centre. Besides, issuing books and running reading room services they organise documentation service, book fairs, reading competitions, radio listening forums, conferences to promote reading habits, extension lectures, vocational training courses and even continuing education courses.

An illustration of the library services functional chart is given on the next page :

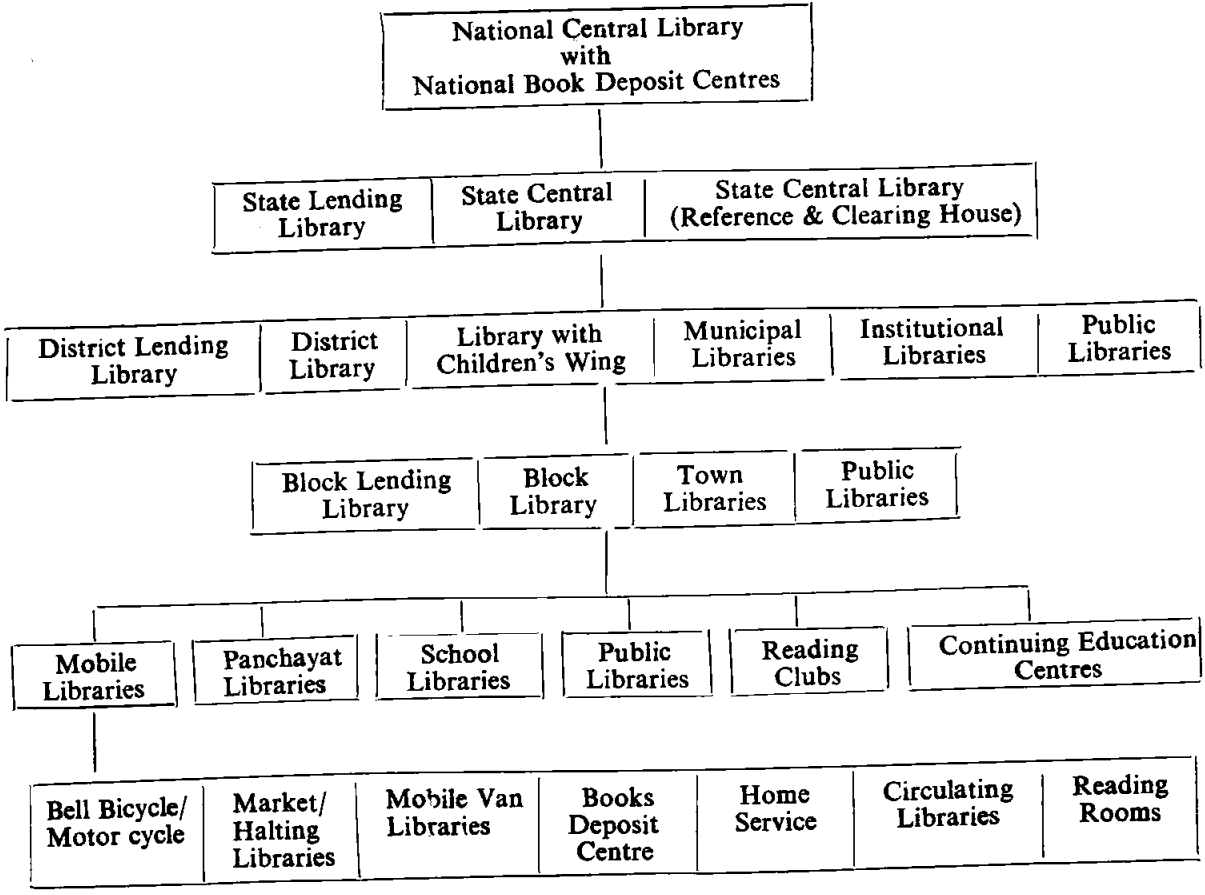
6 LIBRARY ACTIVITIES

A brief description of some of the major library activities undertaken by the state governments and voluntary agencies is given below :

6.1 Raja Rammohan Roy Library Foundation

The Ministry of Education and Culture, Government of India established an independent organisation known as Raja Rammohan Roy Library Foundation in 1972 with a view to promote and support public library services movement in the country by providing adequate library services, both in urban and rural areas, and by developing reading habits all over the country.

THE LIBRARY SERVICES FUNCTIONAL CHART



The other activities of the Foundation include : persuading the central and state governments to enact library legislation where such legislation does not exist, helping build up a national library system, providing financial and books assistance to libraries, acting as a clearing house for ideas and information on library development, promoting research on problems of library development, encouraging established libraries such as district libraries, Nehru Yuvak Kendras and registered organisations to organise mobile library services or circulating library services according to local circumstances and extending assistance for reorientation training of the librarians working in rural libraries.

The Foundation extended assistance to 6,113 libraries at different levels during 1978-79. Under the schemes of processing (cataloguing and classification), binding and preservation of out-of-print and rare books and manuscripts the Foundation gave grants to 49 libraries. The Foundation has a plan to develop one library for every 5,000 population by the end of the Sixth Five Year Plan in cooperation with the state and Union territory governments and voluntary organisations.

6.2 The Kerala Granthasala Sangham

The Kerala Granthasala Sangham established in 1945 is one of the biggest rural library movements in India. It runs about 4,091 libraries in all parts of the Kerala State. It has over one million people as its members and 8 million books. It has a well defined organisational structure from state to village level. The libraries are also classified into different grades according to the facilities available, number of books and coverages. The other post-literacy activities of the Sangham include : organisation of writer's workshops, publication of books, preparing adults to appear in examination's of formal system, organisation of conventions of librarians, training of rural youth in organisation and management of rural libraries.

6.3 Kerala Association for Nonformal Education and Development Kanfed

The KANFED is a registered voluntary organisation devoted to the cause of eradication of illiteracy, promotion of adult education and post-literacy programmmes in the State of Kerala. Its activities in the area of post-literacy include : bringing out a *KANFED News Weekly*, a monthly Wall News Paper, publication of books for new literates, organisation of different types of library services (3,000 units), namely--mobile libraries, public libraries, children's libraries, libraries linked with literacy instructions, continuing education classes; correspondence courses and training of local workers in organisation and management of rural libraries.

6.4 Karnataka Adult Education Council

The Karnataka Adult Education Council runs 12 central libraries, 22 circle libraries and about 3,000 rural libraries. It brings out a weekly newspaper *Balaku* and a Wall News Paper for new readers. Both are supplied to all adult education centres, village reading rooms and panchayats. A set of 20-30 books is given to each centre by the Council towards the end of 10 months literacy training course. The other post-literacy activities of the Council include: residential training programmes on family life education and crafts for graduates of women literacy centres, writer's workshop, publication of books, running of mobile libraries, training of rural librarians, organisation of book fairs, reading clubs, etc.

6.5 Literacy House

The Literacy House established in 1953 is another voluntary organisation doing pioneering work in the field of literacy retention and rural libraries. It has developed and tried out a variety of patterns of reaching new readers at low cost, such as tin trunk libraries, market mobile libraries, halting libraries, bell-bicyle libraries, rural library as an extension service of a school, rural libraries through interest groups such as youth clubs, women's organisations and reaching new readers through magazines—Ujala and Ghargrasthi.

The District Library of Literacy House loans books to village libraries, voluntary organisations, educational institutions and groups interested in helping the new literates in retaining of their newly acquired literacy skills. So far, it has extended assistance to more than 350 libraries, served about 50,000 members and issued approximately one million books.

The other post-literacy activities of Literacy House include : organisation of writer's workkshops, publication of books, training of rural librarians, organisation of book fairs, reading circles, discussion groups, conducting studies on reading interests and other continuing education activities.

6.6 Library Services in the State of Uttar Pradesh

Although, adult education is regarded as part of the Education Department, the library services in the state are provided by various agencies and departments, namely, Rural Development and Reconstruction, Harijan and Social Welfare, Youth Services, Panchayati Raj and Education, local self-bodies and voluntary organisations. The library services provided by different agencies include : State level central libraries (4), district libraries (15), Block libraries (875), village libraries (8852), and more than 3,600 reading rooms. There is a well defined organisational structure from state to village level but there is

hardly any organic functional relationships between them. At the secretariat level there is a post of an Officer-on-Special Duty (Libraries).

The Education Expansion Section in the Department of Education looks after the promotion of readership and library services in rural and urban areas. Its activities include : organisation of libraries and reading room services, provision of services through mobile libraries and mobile film vans, writer's workshops, production of books, preparation of educational films, use of folk media-puppetry, katha, drama for dissemination of information on social themes and bring out a monthly magazine *Jan Siksha*.

The Librarians Association of Uttar Pradesh conducts part-time training courses for persons interested in organisation and management of libraries.

The Directorate of Adult Education, Uttar Pradesh has developed a plan as part of the follow-up activities to provide library and reading room facilities to all persons who have attended adult education centres through a network of more than 12,000 circulating rural libraries.

6.7 Delhi Public Library

The Delhi Public Library is one of the most well equipped libraries in India. It was established in 1951 as a Public Library Pilot Project by the Ministry of Education, Government of India in collaboration with UNESCO. At present it consists of a central library, 24 branches and sub-branches a Braille Department for the blind, children's section and a net-work of mobile service stations and deposit stations.

The library has a collection of 6,42,073 volumes in five languages namely Hindi, English, Urdu, Punjabi and Bengali. It has 99,359 (53,742 adults and 45,617 children) registered borrowers. The library issued more than 27,00,000 books to its readers during 1980-81. The library also extends technical advice, practical training and guidance on public library matters pertaining to the organisational set up and procedures to other organisations.

6.8 Library Services Models for Persons with Limited Reading Abilities

The committee on post-literacy and follow-up programmes of the National Board of Adult Education developed six possible models for organisation of continuing education and post-literacy activities for participants of the adult education centres. Out of tbese six models three models are related to library services.

6.8.1 Mobile Library and Continuing Education

This model envisages to serve a compact area, having 14 to 15 adult educa-

tion centres, by one whole time continuing education worker (CEW). Assuming that the number of villages in which these centres are located is 10, it should be possible for CEW to pay visit to each village at least 3 times a month. He can also arrange short-term training courses on subjects of special interests to learners and promote readership.

6.8.2 Diversification of Existing Village Libraries

A large number of villages in the country already have village libraries. At present these libraries do not primarily serve the neo-literates. They will be reorganised and revitalised to serve the learning needs of neo-literate learners. Post-literacy activities in these villages will be organised through the person incharge of these libraries. They will be oriented to serve the learning needs of the neo-literates and organise programmes of functional education, social service and recreation, etc.

6.8.3 Follow-up Activities through Students

In this model follow-up activities are taken up by students as part of National Service Scheme. Each student is expected to cover 12 to 15 families visiting each family at least twice a month. Besides, distribution of books the students are mobilised for creating learning environment both rural and urban areas.

6.9 Library Service in other States

The public library services in other states are organised more or less on the patterns explained above. The overall picture of libraries in the country is disappointing. The problems faced by the libraries include : insufficient allocation of funds (per capita expenditure on library services ranges from 00.3 paisa in Uttar Pradesh to 31 paisa in the union territory of Delhi), non-availability of trained personnel to run libraries at the local level, lack of interest in libraries among the local leaders, lack of coordination among agencies and absence of a national policy on development of libraries.

7 SUGGESTIONS FOR STRENGTHENING LIBRARY MOVEMENT

The following suggestions are given for consideration to strengthen the library movement in India in the context of creating a new learning society.

1 An integrated plan for library development should be prepared as part of programmes for social and economic development and should be included in the national plan.

2 A survey of services currently offered by different types of libraries should be undertaken before the formulation of a national plan on library develop-

ment. A percentage of the budget for education should be spent on libraries.

3 Library legislation should be enforced in each state to facilitate the development of libraries and assure adequate financing by local, regional and state authorities.

4 Programmes promoting literacy and cultural activities should form an integral part of library services.

5 Mobile libraries should be established and effective delivery of books be ensured. It will be worth while to integrate village libraries with village panchayats. Village officials should be involved in the functioning of rural libraries. Panchayat secretaries, village level workers, local school teachers and youth clubs can contribute most constructively in operation of libraries at the village level.

6 The unemployed or underemployed youth, who after proper orientation training takes up the progrnmme of running libraries as a continuing education centre on more or less full-time basis, could also take up the responsibility for organisation of non-formal education centres for pre-school children or for 6-14 age-group. Apart from providing a most suitable category of adult education instructors, this could also help generate a new class of rural leadership and may also contribute to the reduction of rural employment.

7 The development of book-shops should go hand in hand with that of libraries. Experience has shown that borrowers of books become purchasers as well. The counter sales to individuals could be expected to increase alongwith institutional sales through school and public libraries. The multiplication and expansion of libraries could contribute significantly in creating a base for the entire book industry.

8 Teaching methods should be reviewed to increase the emphasis on reading assignments, seminars and tutorial classes, since the widely employed lecture methods does not demand enough individual reading on the part of student.

9 One of the major deficiencies being faced by government as well as voluntary agencies is the absence of professional cadres who can look after libraries and continuing education programmes in rural area. Existing facilities for preparation of such personnel are extremely limited and there is a need for their expansion.

10 In India, not much work has been done in the areas of rural libraries development, post-literacy activities, creation of a learning society, production and distribution of books for new readers, modes of reaching new readers, visual communication, reading interests survey, documentation service, etc. Hence, there are urgent research needs that must be taken up on priority basis.

8 CONCLUSION

It is clear from the document that libraries in general have been given consi-

derable importance in Adult Education Programmes. They are being organised in different forms by various institutions and organisations, both government and private. However, they lack coordination and long range perspective planning, A systematic effort will have to be made to coordinate and mobilise all resources including mass media for development of libraries in the perspective of life-long education.

ADULT EDUCATION AND THE ROLE OF PUBLIC LIBRARIES

K. K. KAMAL

1 INTRODUCTION

The continuing education for the members of the society as a whole is a life-long process. A developing society has to see that adequate provision are available for the all-round development of its members. Adult members of the society draw greater attention due to the fact that their day-to-day problems are more complicated and they warrant immediate efforts to solve. Adult education has, thus, become the talk of the day. Formal agencies of education have limitations of their own. Informal agencies have important roles to play in this regard. Public libraries incidentally, are considered to be the best medium for adult education. Their functions are, therefore, educational, recreational, informational and cultural.

2 ADULT EDUCATION

The idea of adult education was conceived when independent efforts in the later years of life began to supplement the formal schooling. The principles of adult education are deeply rooted in the psychology of maturity and sociology of groups and the community.

2.1 MEANING AND DEFINITION

The term 'adult education' has a wide coverage. Its meaning differs from one context to the other, because each is based on a different need and objective. To some it means 'any new work done by any adult for attaining new knowledge, new understanding any new trends.' According to this, all libraries are adult education institutions since they serve as a storehouse and of means of educa-

tion for them. The education spreads with the growth of these means. To a few others, the adult education means 'an opportunity or help given by any individual or institution to adults for self-development or reforming the society.' According to this meaning, the library will have to play the role of a motivator. It will have to instil or infuse enthusiasm in the adults and motivate them for coming up in their own interest, this can be done by opening 'adult education centre' as a part of the library activities. A few others take it as 'teaching of reading to illiterates'. Some others say that it is 'vocational training'. According to the Adult Education Committee of Great Britain the definition of adult education should mean 'all the deliberate efforts by which men and women attempt to satisfy their thirst for knowledge, to equip themselves for their responsibilities as citizens and members of society or to find opportunities for self-expression'. The American Association for Adult Education views that adult education aims 'to inspire grown-ups to be something more than they are now, and to do their work better than they do it now.' It can be concluded that adult education is a non-formal continuing education programme for betterment.

2.2 Historical Background—Bihar

The beginning of the mass literacy movement dates back to 1938 when Dr. Syed Mahmud, the then Education Minister appealed to the educational institutions to devote their summer vacation in eradicating illiteracy. It made a good start and gradually gained so much attention that the government set up a separate Directorate for social and youth welfare in 1962. However, 1967 was the fateful year since this directorate was abolished and its subjects distributed to other departments.

2.3 Present Scene

Population is a great factor in the assessment of the situation. It germinates problems. The density and percentage increase of population in India given in Table 1 brings out a few points to ponder over :

Table 1 : Density and Percentage Increase of Population

Year	*Density per sq. Km.*	*Decade*	*% increase in population*
1931	90	1921-31	11.00
1941	103	1931-41	14.20
1951	117	1941-51	13.30
1961	142	1951-61	21.50
1971	177	1961-71	24.80
1981	221	1971-81	24.75

The table shows that there has been an increase of 24.75 per cent in 1981 in comparison to the 1971 Census. The main reasons behind the steady population growth are said to be better health conditions, epidemic control, effective handling of famine-conditions, and general improvement and economic development. Fall in the death rate is said to be the result of these conditions. The percentage of literacy growth in India given in Table 2 below depicts another problem.

Table 2 : Pereentage of Literacy Growth in India

Year	*Percentage of literacy*		
	Total	*Males*	*Females*
1931	9.50	15.59	2.93
1941	16.10	24.90	7.30
1951	16.67	24.95	7.93
1961	24.20	24.44	12.95
1971	29.45	39.45	18.69
1981	36.17	46.74	24.88

As is evident from this table the improvement in the proportion of literates is low among both males and females. The improvement in the case of females, however, is noteworthy. It means that nearly 64 per cent of the people in the total population are illiterate. Going into the further break-up it is found that nearly half the males and nearly three-fourth of the females in the country are illiterate.

From tables 1 and 2 it is clear that some positive steps are necessary if we wish that India should fall in the category of developed countries. The greatness of a country does not depend on the number of educational and training institutions it has. The important point of consideration is the number of its citizens endowed with an awareness of their duties and responsibilities. Such citizens, who can come forward with dedication to attain and promote knowledge, grow and develop moral virtues, suppress evils like corruption, greed, cruelty and injustice, are needed. After all the fundamental aim of knowledge is to impart a new life and a new soul to the country and the nation. The truth is that although our independence and self-rule are now thirty-five years old, India has not come forward in line with the developed countries. The chief reason of this backwardness is the high percentrge of illiteracy, which has affected agricultural growth, industrial production and employment.

3 NATIONAL ADULT EDUCATION PROGRAMME

The national adult education programme (NAEP) was launched by the

Government of India on 2nd October, 1978 to eradicate illiteracy. The massive programme aims to make literate 100 million men and women in the age group 15-35, in the next five years. Adult Education Boards at national and state level have been set up to advise the government. District-level committees have been formed to coordinate and oversee the implementation of the programme at local levels. Voluntary organisations have been associated with the programme and financial assistance has been given to them. The various agencies, which are helping in implementation of the programme, are state governments, union territories, voluntary agencies, universities, colleges, Nehru Yuvak Kendras, etc. Such centres totalled 91,510 as on April 1, 1980.

4 PUBLIC LIBRARY'S ROLE IN ADULT EDUCATION

Library is an indispensable agency for adult education. The process of communication is generally through the following media, which constitute a modern public library—printed page, radio, motion pictures and television. Library's functions are many, but the following services, which have a bearing on adult education are noteworthy :

(i) Indirect guidance services;
(ii) Advisory services to individuals;
(iii) Services to organisations and groups;
(vi) Library-sponsored group programmes; and
(v) Community advisory services.

4.1 Problems

The adult education problems cannot be viewed in isolation from the general conditions of life. The libraries, too, like other agencies, face many problems as far as implementation, planning, and designing the adult education programmes are concerned.

4.1.1 *Illiteracy on Increase*

It is said that there are 400 million Indians today who cannot read and write in any language. There are more children out of school now than ever in the past. Only two out of every five children, who enter school, stay and complete the primary education. The futurologists predict that, by the year 2000 A.D., 55% of all adult illiterates of the world will be Indians.

4.1.2 *Complex Under-thinking*

The poverty-stricken people, who happen to be in the majority, think in a

different way. Their poor and deteriorated conditions of life nurture false consciousness. They think that they are destined to live and die in poverty and that neither education is meant for them nor are thier children competent for education.

4.1.3 *Formal Education vs Informal Education*

The formal education has become meaningless. It leaves no impact if it is not combined with informal education. The difference between the two is that of between students and the boatman. Once some students were crossing a river by boat. After ascertaining from the boatman out of fun that he never learnt or even heard the words like Science, History, Geography, Arithmetic and Algebra, the students remarked that the boatman wasted half of his life and learnt nothing. The boatman kept silent. Soon afterwards when a storm arose and the boat began tossing on unruly waves the students felt extremely nervous. Seeing the imminent disaster and reading the nervousness on the face of the students the boatman asked them what they had learnt. The students enumerated a long list of subjects which were taught in the college. The boatman smiled and remarked that their education is not going to help them in the storm. Swimming would have helped them, but they were not taught. The boatman finally remarked that he has wasted half of his life, but the students have wasted the whole of their lives. The conclusion is that formal education is theoretical, whereas the informal education is practical and need-oriented. Formal education alone does not help in informal education is side-tracked.

4.1.4 *Age Factor*

Adults are mature people. They cannot be brought together like children.

4.1.5 *Prices of Books*

Steep rise in the prices of books is a great disincentive to the neo-literates.

4.1.6 *Facilities for Continuing Education*

The absence of a network of libraries means that the adults do not have opportunities to refresh, to learn more and to keep pace with the latest developments in the areas of their interest. At times the responsibility of collecting the old books available in the villages and building a library is thrown on the neo-literates of the rural areas. This is just passing the buck. A suitable and adequate post-literacy and continuing education programme should be planned, executed and followed up so that the tendency to relapse does not occur.

4.1.7 *Incentive*

The idea of incentive to the neo-literates as well as to the educators is something which is either overlooked or considered waste. It is so probably on the ground (or misconception) that 'education; 'devotion' and 'sarifice' are interrelated and they come from the same family.

5 SUGGESTIONS

A few suggestions, which may bring in fruitful results; can be considered and should be given thought to.

5.1 Realistic Planning

The planning for the adult education must be realistic, relevant to the environment and learners' need-based.

5.2 Linking Adult Education with Formal Education

Ways should be found out to link adult education with the formal system of education.

5.3 Population Education

Population education should be given due place in the adult education programme.

5.4 Motivating Adults to Learning

Public libraries should play an active role in motivating the adult population of the community to learning.

5.5 Moderately Priced Books

The government should take up the responsibility of producing and providing neo-literature and other books to the public libraries at prices suited to the average library budgets and also to the pockets of the neo-literates.

5.6 Associating Public Libraries with Adult Education Programme

Although the vital role of public libraries in adult education is established, it should be the government's responsibility to associate the public libraries with the central and state governments' adult education programmes. The added recognised participation and contribution of the public libraries will undoubtedly bring fruits.

5.7 Library Legislation and Coordination among Public Libraries

Every state and the union territory should have library legislation. This will ensure coordination among public libraries in the country, providing a massive base to the struture and shape of the adult education programme.

5.8 Formative Research, Feedback System, Quick Appraisals and Management Information System

Formative research on the process of programme-forming at the local level, feedback at frequent intervals, quick appraisals of the adult education programme for the real picture, and Management Information System to provide uptodate and accurate 'Status Reports' for taking up suitable corrective measures to strengthen the sectors and areas lagging behind, should be developed and implemented.

5.9 Dedicated Educators

Due care should be taken while selecting people as adult educators. Aptitude tests should be conducted at the time of their recruitment. This will also ensure initiative and sincerity on the part of the educators.

6 CONCLUSION

It is high time for the public libraries to prove that they are real sources of knowledge to neo-literates and that is possible only when felt and acted upon. The call has come—'arise, awake and stop not till the goal is reached.' We have to realise now that to make adults literate is of prime importance but to make the neo-literates maintain literacy is of higher importance since there is every likelihood that the neo-literates will fall back to illiteracy in course of time. Let our public libraries shoulder this responsibility of keeping the lights of learning on for each and every member of the society.

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DEVELOPMENT OF PUBLIC LIBRARIES IN KERALA : A REVIEW

M BAVAKUTTY

1 INTRODUCTION

According to 1981 census Kerala, the southern most state has the highest percentage of literacy (70%) in the country. The reading habit of the people of the state is also very high comparing to the rest of India. This may perhaps be the reason for the existence of a large number of public libraries in the state. There are 4,200 public libraries in Kerala, one in every 10 square kilometers. Most of them are established with the sole initative of the local people.

Kerala state was formed in 1956 by the integration of Malabar, until then part of the Madras state and erstwhile Travancore and Cochin princely states. The three constituents have different kinds of public libraries catering to the reading requirements of the people in a limited way.

2 TRAVANCORE-COCHIN REGION

In 1945, the All-Travancore Grandhasala Sangham was founded with a membership of 47 libraries. This Association started the pioneering efforts of promoting the cultural interests of the people through public libraries. The Sangham gave leadership for reviving defunct libraries and organizing new ones by kindling the inherent sentiments of social work among the educated youth. It is this voluntary effort which is responsible for the establishment of large number of public librares throughout the state. Sangham with the timely help of the state government encouraged and provided proper guidance for the establishment of public libraries.

The All Travancore Grandhasala Sangham extended its activities to Cochin area in 1949 following the integration of the erstwhile Travancore and Cochin princely states and to Malabar area the formation of Kerala State in 1956. Since then the Sangham has been known as Kerala Grandhasala Sangham.

The Sangham is basically an association of libraries. It has been successful in carrying the message of the library movement to the people. For this, public meetings symposia, seminars, workshops, etc. are periodically organized. Systematic programmes and encouraging attitudes of the Sangham led to the establishment of a large number of public libraries and reading rooms in every nook and corner of the state by the enthusiastic local people. At present, there are about 4,200 libraries affiliated to the Sangham.

The main financial resources of the libraries affiliated to the Sangham, apart from the government grant are monthly subscriptions of the library members and donations collected from the public. A peculiar feature of the these public libraries which can not perhaps be seen any where else is that they are functioning as cultural centres of the community at large. Under the auspices of these libraries cultural entertainment programmes, literacy classes, nursery classes, sports and games, etc. are regularly organized. Full participation of the local people for the establishment and running of public libraries with maximum enthusiasm is a remarkable phenomenon peculiar to Kerala State. In 1976, duringthe emergency period, the Government of Kerala superseded the democra ticaly elected executive body of the Sangham and the government control still continues.

3 MALABAR REGION

The public library set up in Malabar is entirely different. The first library legislation in the country was enacted in the Madras state in 1948. Thus, Malabar which was one of the districts of erstwhile Madras state was also benefitted. The Malabar District Library Authority, created in accordance with Madras Public Libraries Act of 1948 established large number of free public libraries through out the Malabar area. When Malabar became part of Kerala, this large area was divided into three districts namely Palghat, Kozhikode and Cannanore and three local library authorities were created by the state government. District library authorities established district libraries and a number of branch libraries. At present there are about hundred branch libraries in the Malabar region. All these libraries are manned by full time, very often professionaly qualified personnel.

As per the provisions of Madras Library Act local bodies such as muncipalities and panchayats are empowered to collect a library cess of 3 paise per rupee as surcharge on property tax or house tax callected in its area and to hand over the same to the library authorities concerned. The state government has to provide a sum equal to the amount thus collected as library cess. But most of the local bodies are not regular in remitting the library cess collected to the library authorities and the attitude of the government towards the payment of matching grants is also found to be not punctual. Because of this, all the

three library authorities are facing accute financial crisis. They are even finding great difficulty in disbursing salary to the staff of the libraries. Acquisition of new books are practically stopped and subscriptions to journals are not renewed. In such a situation no one can expect satisfactory library service from the libraries run by the local library authorities.

Side by side with the local libraries there are many small libraries in Malabar region established with the local initiations, now receiving grants from the state government through Kerala Grandhasala Sangham.

Many public libraries in the state are receiving gift books, and financial assistance from Raja Rammohan Roy Library Foundation which was established in 1972, the bi-centenary year of the great educational reformer with a view to strengthen the public library service through out India and further to promote the reading habit among the people.

4 DEFICIENCIES OF THE PUBLIC LIBRARY SITUATIONS

Present library situation in the state has certain serious deficiencies. They are the following :

(i) The libraries affiliated to the Sangham do not belong to an integrated and systematic public library system. 'They stand as isolated monuments of the urge for knowledge and the demand for reading facilities expressed by the people of Kerala through a centuary old popular movement.'

(ii) Each library affiliated to the Kerala Grandhasala Sangham is an independent unit established to serve the people of a particular area. But having been subscription libraries they are accessible to only a small section of the society.

(iii) The meagre financial resources available with the state as a whole to be expended for the public library service, are being dissipated among thousands of small libraries. The state is spending about Rs 15 lakh per year for public library service which is thinly spread over the large number of libraries in the form of inadequate grants and consequently the benefits which the people derive are not commensurate with the total amount spent by the government.

(iv) Within the limits of meagre financial resources these libraries can provide access to the people only to a limited book collection which is totally inadequate for their needs. So the concept of a public library and of library services become severely restricted.

(v) Though there has been quantitative expansion of public libraries there has not been qualitative improvements in the book collection. This is so, because most of these libraries came into existence with donated books. The per capita book provision and use of books are low considering the high rate of literacy in the state.

(vi) Most of the libraries purchase almost the same books. While there are

a number of copies of the same book, the total number of different titles held by all libraries in the state put together, is considerably small. Thus the people on the whole get access to a comparatively small number of titles.

(vii) The bulk of the book collection of most of the libraries is formed of novels and other forms of fiction, while books needed to cater to the educational, vocational and reference needs of the community that a public library seeks to serve, are by and large ignored.

(viii) Majority of the libraries are not properly manned and scientifically organized. It is not possible for the grant-in-aid libraries with their financial resources to engage professionaly trained librarians.

5 LIBRARY LEGISLATION

Even prior to the attainment of independence of the country, Kerala made earnest efforts towards library legislation. A significant event in this connection was that in 1946 late Dr S R Ranganathan prepared a draft bill each for the erstwhile states of Travancore and Cochin. But due mainly to strong opposition from bureaucrats the bill could not be passed by the legislative assembly. Again in 1959, at the request of E M S Namboodiripad, the first Chief Minister of the re-organized Kerala State, Dr S R Ranganathan prepared a library bill and a library development plan for the newly formed state. But with the dissolution of the Communist Ministry, this attempt did not become fruitful. Later governments also assured the people of proper enactment of a bill for the establishment and organization of a public library system in the state. But it still remains an unfulfilled promise. During the last one decade three draft bills were introduced in the legislation, the latest being the Kerala Public Libraries Bill, 1978. But due to one reason or other the library enactment in the state still remains an unfulfilled promise.

6 KERALA PUBLIC LIBRARIES BILL 1978 : AN EVALUATION

The structure of public library service envisaged by the bill is a unitary one where there are state central libraries, district central libraries, branch libraties and delivery stations falling one below the other at different levels. The bill provides for taking over the existing 4,000 grant-in-aid libraries and the libraries coming under the local library authorities of Malabar area by the respective district library authorities. This will amount to the liquidation of the present grant-in-aid library system.

The public library system has to be viewed as different from the grant-in-aid library system. And the library legislation should provide for continuance of the grant-in-aid library system and for the establishment and maintenance of a new public library system. The Sangham may be given statutory recognition

for the purpose of exercising its present functions in respect of grant-in-aid libraries. The library authorities, on the other hand, should be made responsible for the public library system of the state. There should be proper co-ordination between the public libraries on one side and the grant-in-aid libraries on the other side.

6.1 Library Authority

The bill provides only for a nominal state library authority. It insists that the state library authority should seek the assent of the government before any of its decision is carried out. This provision will make the authority a mere advisory board of the government. An amendment to this has to be made and the whole responsibility of the library service in the state has to be entrusted with the state library authority.

The composition of the state library authority and the district library authority deserves special consideration. According to the provisions in the bill certain categories of interests which do not have any direct relationship with the planning and development of library service are represented, while certain others who would be more useful are kept out. The Kerala Sahitya Nataka and Lalitkala Academies are given representation in the state library authority. Apparently they have little to do with the library development activities. It is significant to note, in this context, that library authorities in the neighbouring states have not given these academies any representatson. On the other hand, the Kerala Library Association is not represented in any of the authorities provided in this bill.

6.1.1 *Professional Representation*

There cannot be any difference of opinion regarding the desirability of having adequate library professional content in these authorities in order that proper planning and organisation of library service on modern lines becomes possible. But in the Kerala Library Bill there is provision to nominate only one library science expert. This provision should be raised at least to four and provision must be made to include experts in district library authorities and city library authorities as well.

Taking into consideration the special situation prevailing in the state, it can be easily concluded that there are three major components of a purposive body or bodides to be created for being responsible for the establishment and development of the public library system in Kerala. They are : (1) the government, (2) the Kerala Grandhasala Sangham, and (3) the professional librarians. All these three major components should get equal representation to the extent of three-fourths, while the representation for the various other interests should be

confined to the remaining. When the state library authority is constituted with full autonomy as suggested earlier it is all the more important that the professional content in this body is adequately ensured. While there should be representation for the Kerala Grandhasala Sangham in the State, District and City Library Authorities in their turn should be represented on the corresponding bodies of the Sangham also. In this way the proper coordination of the twin library systems can be fully effected.

6.2 Finance

In the matter of finance the bill does not seem to be drafted on realistic grounds. 4,200 libraries which now receive grant from the state government through the Grandhasala Sangham are to come under the direct control of the government under the bill. Thereby the government is shouldering a heavy responsibility. For payment of salary to the employees in the above libraries alone, the government would have to spend more than Rs 14.5 lakh which is now being spent for the functioning of all the libraries. And it is not an easy task to shape a scientific and modern library system comprising all the independent libraries. Hence it would be better to leave these libraries as such with continued eligibility for the grant they receive at present.

6.2.1 *Library Cess*

Another important point deserving consideration is the base of the library cess. The bill provides for the levy of a library cess on all persons who are liable to pay property tax at not more than 10% of the tax. The financial memorandum appended to the bill has proposed only a rate of 3% against the 10% prescribed in the act. The library cess thus collected would come to Rs 6.5 lakh only. Together with the matching grant from government the total library funds of the state would be only Rs 13.0 lakh. This is against the present annual expenditure towards libraries of the order of about Rs 14.5 lakh which has been proved inadequate to support the grant-in-aid libraries. If the maximum of 10% library cess is collected the total amount that would be available will work out to Rs 21.0 lakh. Together with the matching grant the total library funds for the state would be only Rs 42.0 lakh. Even this amount would not be sufficient for supporting an ideal library service in the state. Therefore, cess has to be enlarged. The library cess should be extended and should include surcharge on other taxes, like the tax on goods arriving within the jurisdiction of the local bodies, tax on vehicles, professional tax, etc.

7 CONCLUSION

The basic objective of library legislation is to bring about an integrated and

efficient public library system in the state and to make statutory provisions for adequate financial support to such a system. Though the present Kerala Public Libraries Bill has certain defects, it can with necessary modifications form the basis for a proper library legislation in Kerala. The difference of opinion among those in the library profession have been the fundamental reason for delaying the enactment of library legislation in the state. Unless they come to a settlement there is every possibility for further delay in establishing a public library system in the state.

DEVELOPMENT OF PUBLIC LIBRARIES SINCE INDEPENDENCE IN ANDHRA PRADESH—A REVIEW

R S SASTRY
N B INAMDAR

1 ETHOS AND OUTLOOK

1.1 DEVELOPMENTS PRIOR TO 1960

Andhra Pradesh is one of the new states formed consequent on the decision taken to restructure all the former provinces and princely states in the country on linguistic basis. The state was constituted and inaugurated on November 1, 1956. It is also one of the few states where library movement took deep roots among the people and library services, in those early days, formed an integral part of one's daily life. This characteristic emotionally and otherwise, we owe to the pioneering work done by the Andhra Desha Library Association and its leading enthusiastic members.

1.2 FIRST LIBRARY LEGISLATION

Prior to the advent of independence, libraries in this part of the country were mostly privately managed institutions. The Madras Library Act, 1948 was the first ever concerted effort made to institutionalise, structurally and otherwise, coordinate and organise effective library service for the people. The provisions of this Act continued to be operative in the 11 districts of Andhra area till the year 1960. Thus, by the year 1950-57 we have had the following network of libraries functioning in this area[1] :

(i) 11 District Central Libraries;
(ii) 125 Branch Libraries (Taluk level);

(iii) 1,045 Village libraries run by Panchayats, municipalities, district boards and cooperative societies, etc.

1.3 Hyderabad Library Act 1955

In the year 1955 the former Hyderabad State had put on the statute an Act relating to library services, viz,, the Hyderabad Public Libraries Act, 1955. The Act remained operative in the area that came to be identified as Telangana till 1960. By the time the Act came to be effectively implemented, it was overtaken by the phenomenon of reorganisation of states. Be that as it may, even by year 1956-57, there were 56 branch libraries and during the second Five Year Plan period district central libraries were opened. The former Asafia Library was declared as the State Central Library—the centre-piece for the network under this Act.[2]

The state of library service in Andhra Pradesh at the point of time (1956-57) was as follows[3] :

(i) Total book stock	1,75,000
(ii) Books consulted and issued for home reading	12,36,400

(iii) A mobile library at Eluru, West Godavari district.

All this is in addition to the serveral private libraries that were operating with local support.

Subsequent to the year 1956, Andhra Pradesh faced the peculiar situation of two different libraries' enactments operating in different districts for four years.

1.4 Development Since 1960

This predicament could not continue for long. By the year 1960 the state government decided to bring about a unified library pattern for the whole of Andhra Pradesh.

In the meantime the Government of India appointed a committee to review existing services and make recommendations for organising comprehensive library services in different states in the country. In the year 1959, the committee recommended[4] :

1 Government of India and state government should have a 25 year Library Plan to raise the library structure from its present embryonic dimensions to a size which will do justice to the cultural and educational needs of the people,

2 Government should levy a cess of 6 paise in a rupee of property tax in all places with permission for the local bodies to raise the cess;

3 Government of India should contribute to the library funds of a state an amount equal to the cess collected in the state;
4 To begin with, state governments should give grants equal to the cess collected and gradually in the course of the next 25 years raise their contribution to three times the cess collected;
5 Suitable existing subscription libraries should continue to receive aid from state governments;
6 State governments should enact a comprehensive state library law;
7 Similarly the Government of India should enact a Library Law incorporating :

(*a*) right of every citizen to have free access to libraries as his fundamental right;
(*b*) collating the various deposit sections under the Copyright Act, the Delivery of Books Act, and the Press and Registration of Books Act and making them subserve the needs of a national library service, and
(*c*) providing for financial assistance to state governments.

2 ANDHRA PRADESH LIBRARIES ACT, 1960

In the context of all these, in the year 1960, on the advice and guidance of the Dr S R Ranganathan and after considering the several amendments put forward by Sri Vavilala Gopalakrishnayya and other workers, the Government of Andhra Pradesh put on the statue the unified Andhra Pradesh Public Libraries Act, 1960 which is applicable to the entire state. While under the Madras Act 1948, libraries continued to be administered by the Department of Public Instruction till 1972, with no separate Director for Libraries, and Educational Officers functioned as Secretaries of District Library Authorities, the Andhra Pradesh Libraries Act, 1960 secured for libraries the following advantages :

(i) A separate department of libraries;
(ii) A separate director of libraries; and
(iii) Appointment of district librarians as secretaries of zilla grandhalaya Samsthas.

Again, realising the need for clearly spelling out the implications of the provisions of the Libraries Act, 1960, the State Government invited the late Dr S R Ranganathan to direct a seminar in the year 1962. The seminar recommended as follows[5] :

1 Director of Public Libraries should also be the Librarian of the State Central Library.

2 (*a*) The state central library should function as a reservoir for the library system of the state;
(*b*) stock copyright collection of books published in Andhra Pradesh;
(*c*) should publish state bibliography of Telugu books published in the state. Should publish bibliography of books in languages other than English published in Andhra Pradesh as a part of the Indian bibliography;
(*d*) should be a depository for at least one sound copy of each of the various books and periodicals discarded from time to time by other libraries in the state;
(*e*) should specialise in acquiring copies of books too costly to be owned by local libraries;
(*f*) Books should not be lent out to indivduals. These should be lent out to libraries in the state on demand. Should build up a fairly good collection of classics and rare books of state interest;
(*g*) should maintain a union catalogue of learned periodicals and of the rare books in the local libraries in the state;
(*h*) should help in inter-library loan both within and outside the state;
(*i*) should guide all technical services in the state; and
(*j*) should be a reference library.

3 All professional and semi-professional staff in the library system should be borne on the state library cadre.
4 Selection of new periodicals and renewals and audiovisual and other non-conventional reading material should be made by the Book Selection Committee. Selection of conventional books in various subject fields should be made by the librarian at suitable intervals in consultation with the concerned expert in the panel of experts. Purchases should be made by the Librarian.
5 Library finance should be raised at three levels—local, state and union. Union government grants should be utilised only for capital expenditure on library buildings, fittings and furniture and their periodical extension and renewal. Also for purchase of a large initial stock of reading material. State government grant and proceeds of library cess should be utilised towards recurring expenditure of the state library system.

The rapid strides expected of the library movement through implementation of the above recommendations suffered a serious set-back through the inexplicable indifference of the authorities concerened. The result was that the seminar report (1962) went into cold storage. The report itself was not printed and published for the next 2-3 years.

Not un-understandably, therefore, library movement and library service

moved on thereafter in fits and starts, lurching forward here and breaking out of the shell there, depending on pressures exerted by interested parties. Naturally, in the years that followed, growth of libraries and services in the state remained either stunted, or acquired all the disabilities of wild, unregulated and unplanned growth resulting in a totally lopsided development. For a new, emerging and service-oriented agency the Libraries Department exhibited total lack of perspective and initiative and a willingness to experiment, design and innovate new procedures avoiding a lapse into traditional administrative tangles. To quote the criticism of the Vavilala Committee which is strikingly relevant[6] :

> "The Dept. of Libraries which emerged as a part of the system through legislation, instead of developing methods, patterns and techniques of its own commensurate with the socio-cultural role of a library,o ffered itself to be enmeshed in the tentacles of traditional administrative writs, consuming reams of paper, creating walls of alienation and an atmosphere of dysfunction inhibitive of meaningful communication and exchange. And libraries and library service lapsed into irrelevance in the daily life of the common man."

Similarly, the different agencies and units of service which should have been knit together into an effective channel of communication down to the citizen in the remotest village, remained parcelled out under different managements : State Central Library and Regional Libraries under Government district libraries, branches units under the Zilla Grandhalaya Samsthas and other under municipalities, panchayats, Samithis, cooperative societies and private managements, without proper guidance and direction, little coordination and planning and with no linkages between themselves or with other units outside.

3 BOOK SELECTION

Then came the crowning blow in the form of centralisation of book selection at the government level in 1969. Sitting at Hyderabad, a committee constituted by government is entrusted with the task of selecting books for all citizens in the far flung corners of the state. It passes one's comprehension as to how a committee sitting in isolation, could be expected to identify the information needs of all the 6 crores citizens living in all the villages and towns in all the districts of the state. The list of selected books that finally emerges suffers from : (*a*) obsolescence; (*b*) duplication of titles that were included in earlier lists and those in the list finalised for supply by the Raja Ram Mohan Roy Library Foundation; (*c*) non-availability of material in the market owing to time-lag; (*d*) a certain irrelavance of the titles to local needs, immediate and long term; and (*e*) consequential wastage of scarce financial resources. This procedure suffers from yet another handicap. No meaningful survey of the use to which books so selected were

put to, has been undertaken during the 13 years it has been in operation. The committee, therefore, operates in total isolation attempting to impose on the people and the community only the preferences, prejudices and predilections of a chosen few who get nominated to the committee.

4 REVIEW COMMITTEE REPORT 1976

These and other issues relating to reorganisation of the entire set-up were discussed at length at two state-wide conferences in 1972 and 1974 organised by the state government and resolutions and propositions persented to government have only been accumulating dust over the years. It appeared as though the entire net-work activated only in occasional jerks like a person struck with palsy. It was in this back-drop that a Review committee headed by Justice Sri Gopal Rao Ekbote was appointed by the state government in 1976 to examine the working of public libraries, accepting the suggestion made by a group of workers headed by Sri Vavilala Gopala Krishnayya. The committee advocated some very desirable changes, chief among them being[7] :

(*a*) The Directors of Libraries should be a professionally qualified person;
(*b*) The Department of Libraries should be strengthened;
(*c*) The State Central Library should be totally reorganised so as to facilitate discharge of all functions devolving on it as a central unit directing, guiding and evaluating library services in the state;
(*d*) Existing regional libraries should be integrated into the library network;
(*e*) All personnel working in libraries in the state should be borne on a single state wide service;
(*f*) The state should organise library service according to state library plan, which should cumulate and intergrate library plans for every district;
(*g*) A state library fund should be constituted which is to be administered by the state library committee;
(*h*) Rigorous library education at junior level should be supported by government, financially and/or otherwise; and
(*i*) Professional associations of librarians should be recognised and supported by state government, financially and otherwise.

These recommendations were made in 1978. No tangible decision has been taken till date and the government have been dragging their feet on the issue of revamping and energising the library network in the state.

5 VAVILALA COMMITTEE REPORT 1978

While the Zilla Grandhalaya Samstha libraries and their services left much

to be desired, it was noticed that the good work put in by private libraries went unnoticed and they were languishing. With a view to see how the private libraries could be reactivated and brought into the main stream of library network the state government appointed a committee in 1978,[8] to review the role played by them, suggest measures for obtaining better services from them, identify good working libraries and to evolve a system of grant-in-aid to private libraries. The committee was headed by Sri Vavilala Gopala Krishnayya and composed of M/s Kodati Narayana Rao and M. Bhoj Reddy. The committee's report was presented in November 1978 and government issued orders formally accepting a majority of the recommendations in G. O. Ms. No. 431 Edn. (E1) Dept. dated 30th April, 1982. The salient features of the scheme are :

(*a*) All private libraries should be registered with the Director of Public Libraries;
(*b*) Registration Fee of Rs. 50.00 now charged under the Societies Registration Act be reduced to Rs. 5.00 for private libraries;
(*c*) Grants in a year should be realeased before the end of December of the year to ensure an even flow of service;
(*d*) For libraries having a minimum of 500 books government would consider giving as grant 50% of the salary of a qualified librarian;
(*e*) Grants to the extent of 50% may be given for construction of buildings in deserving cases;
(*f*) 50% of the total books purchased for distributioa in the state under the Raja Ram Mohan Roy Library Foundation Scheme be supplied to private libraries;
(*g*) All government and quasi-government publications, reports etc., intended for distribution be supplied to private libraries; and
(*h*) Recognised private iibraries should be allowed to participate in the inter library loan scheme, and other schemes of library cooperation in the state library system.

In actively advocating revival of old private libraries and opening of new ones this committee was pursuaded by the idea *that*

"Private libraries based on voluntary effort are to be cast in the role of catalysts which coax, draw out and actively promote the innate sense of service dormant in the individual being. There is all the more a need for such agencies to instigate and activate government and quasi-government units which suffer with a palsy and grounded to-day with the sheer weight of the officiousness and the administrative tangle they are caught in."

These private libraries to be actively promoted are conceived as 'a complimen-

tary force' to the libraries established under the Act, compete with them in service to be rendered and above all to function within the library system of the state.

6 DEVELOPMENTS ON THE GROUND

While enthusiasm, fervour, perspectives and sense of direction broadly did suffer a set-back, we notice changes in numbers of service units, total book stock, number of readers, brought about steadily over the years.

Table 1 below gives the number of libraries, promoted by government, quasi-government and private agencies since 1960-61.

Table 1[10, 11] : Development of Libraries

S No	*Item*	*1960-61*	*1970-71*	*1974-75*	*1978-79*	*1980-81*
1	Govt. libraries (State Central Library) and Regl. libraries	4	7	7	8	8
2	District central libraries including Hyderabad City Central Library	21	21	22	22	23
3	Branch libraries under Zilla Grandhalaya Samsthas	220	552	629	704	791
4	Book Deposit Centres under Zilla Grandhalaya Samsthas	470	504	571	607	602
5	Village Libraries	—	—	7	108	199
6	Aided Libraries (Private, Panchayat and Cooperative Societies)	1,111	1,850	2,159	2,292	2,315

It will be seen that while during the first 15 years since 1960-61, 409 branch libraries were opened, in the next 5-6 years it has slowed down. This is attributable to the inflationary trends in the economy, the consequential ban imposed by government on opening new branches and additional employment, the tardy growth in income from cess for the Zilla Grandhalaya Samsthas etc. Thistre nd is equally in evidence in respect of Book Deposit Centres. Instead, recourse was taken to opening of token libraries/reading rooms in villages managed by village librarians on a consolidated pay of Rs. 75.00 p m While aided libraries

are seen to have gone up in numbers, the quantum of aid such institutions have been receiving has depleted in real value and has been only marginal.

Table 2 below gives details of books consulted, those borrowed home by readers, number of readers, number of registered borrowers etc., which is instructive.

Table 2[12] : Number of Books Consulted, Borrowed and Number of Borrowers, etc

(lakh)

S No.	*Item*	*1960-61*	*1970-71*	*1974-75*	*1978-79*	*1980-81*
1	Book-stock	12.25	37.30	47.80	64.61	77.95*
2	Number of readers (visitors)	88.35	152.14	188.60	264.18	284.25
3	Number of books consulted	—	53.42	38.29	55.80	52.64
4	Number of books lent home	—	48.98	43.16	87.47	89.39
5	Number of registered borrowers	—	127	1.92	3.21	3.67

*Excluding 19 lakh accounted for by aided libraries, book stock is only 58.95 lakh.

The increases in the last 3-4 years are only marginal in respect of all the above items. Even these increases may also perhaps be attributed to the additional funds of Rs. 4 lakh per year received for purchase of books from Raja Ram Mohan Roy Library Fundation. The marginal increase in visitors could be more because of the little increase in literacy over the last decade and the migration of literates from villages to urban areas than any intrinsically concious and improved efforts put in to attract more readers and convert the library into the community's intellectual centre and a centre of creativity.

Table 3 below gives an idea of the expenditure on books and periodicals by all libraries in the system over the years.

Table 3[13] : Expenditure on Books and Periodicals

	1960-61	*1970-71*	*1974-75*	*1978-79*	*1980-81*
Books and Periodicals	6.00	7.46	14.81	49.60	44.01

The sudden increase in expenditure on books and periodicals between 1974-75 and 1978-79 is attributable to a large extent to the enormous increase registered in the cost of printing, paper and other inputs in production of books and the steep increase in subscription rates of periodicals. The drop of Rs 5.6 lakh in the money invested on books and periodicals during the last 2-3 years cannot be understood except in the sense that there are fewer and fewer books and periodicals for serious study in the public libraries in the state. Again, the expenditure on reading materials in 1980-81 worked out to 20.47% of the total recurring expenditure of the state's library system. This is far below the usual allocation of 50% of total expenditure that is expected to be invested in purchase of books and periodicals. This average hides more than it reveals. Of the 23 districts in Andhra Pradesh, at least 6 districts spend only around 15% (ranging from as low as 8.97 in Medak to 15.3% in Karimnagar of the total recurring expenditure for the district), 4 districts around 17%, 2 districts around 20% on books and periodicals. This is a pointer towards the glaring imbalances and backwardness of almost half the districts of the state whose resources are meagre and which stand in urgent need of additional support.

Let us look at it from a different angle. The state spends around Rs 308[14] crores on formal education and the total expenditure of Rs. 1.9[15] crores on library services, which is recognised as a complementary and supporting services at pre-school, school, college and university levels and in life thereafter forms only 0.63% of the state's education budget. It is a meagre 0.12% of the state's total annual expenditure of about Rs. 1,544.6 crores[16].

7 CONCLUSION

If the people of Andhra Pradesh have to draw really meaningful benefits from libraries of the state, and if libraries are to play their intended role as social agencies of dissemination and purposeful utilisation of information and to contribute to mitigating the misery of the millions, elevate their thinking and assist them in competing with their peers elsewhere in national reconstruction, the library network has to be drastpically reorganised[17] by :

(*a*) Bringing groups of libraries now functioning under different managements under a unified management, viz., the state library committee at the state level and the Zilla Grandhalaya Samsthas at the district level and below;

(*b*) Reorganising the state central library functionally into specific branches to conform to the functions and roles expected of it, viz.,
  (i) a reservoir of information and knowledge for the entire state;
  (ii) a reference and research library at the top of the system, abandoning the individual lending handled at present;

(iii) a centre for organising library cooperation;
(vi) a centre for copyright collection;
(v) a centre to compile union catalogue of books and periodicals for the state;
(vi) a centre for compiling bibliography of Telugu publications;
(vii) a centre for organising technical services and guidance for supervision and control of the entire network in the state;
(viii) a centre for the blind and physically handicapped;
(ix) a centre for guidance in preparation of district plans and preparation of state plans;
(x) a main contact house at the state level with the national library networks;
(*c*) integrating the regional libraries with the state library network and identifying and assigning them specific roles;
(*d*) appointing immediately a professionally qualified person to head the Department of Libraries and the library network of the state;
(*e*) bringing all personnel working in the library system on to a single state service;
(*f*) opening more branch and village libraries, clearly defining their purposes and the services expected of them;
(*g*) encouraging all private libraries and reading rooms to participate effectively in all the library cooperation programmes designed for the library network of the state;
(*h*) creating a state library fund consisting of state government, union government grants and donations and endowments etc., to be operated by the State Library Committee;
(*i*) raising the state government grant (contribution) to 10% of the state's education budget;
(*j*) expanding the base of taxes on which library cess is to be levied to cover excise, motor vehicles tax, entertainment tax, betting tax, stamps and registration fee and the like in addition to the present property tax;
(*k*) apportioning a part (30-40%) of the state library fund for distribution to districts on the basis of indicators of backwardness;
(*l*) persuading the union government to contribute an amount not less than twice the state government's contribution (grant);
(*m*) undertaking a quinquennial review of the financial provisions in the Libraries Act; and
(*n*) according recognition and financial support to professional associations and amending the Andhra Pradesh Public Libraries Act, 1960 suitably to provide for the above items.

Since information, awareness, and an ache and urge to serve are the levers that release enormous human energies which constitute the basic investment in social development, the reorganisation/reorientation of library network—the basic social agency – is a prime necessity. And for successful implementation of all social development programmes, like library service, considerable vigilance has to be exercised to combat open resistance from entrenched interests, indifference from administrative and negligence from cadres. Professional associations with committed people have a very significant role to play in creating the right climate for the library network to respond with empathy and imagination to the yearnings of a whole nation.

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POST-INDEPENDENCE PUBLIC LIBRARY DEVELOPMENT : A REVIEW

K M UJLAMBKAR

1 LIBRARY LEGISLATION IN INDIA

There is no uniform public library system in India. The following five states have enacted Public Library Acts.

1 Tamil Nadu (old Madras State)
2 Andhra Pradesh (Telgu speaking area of Madras and Hyderabad State)
3 Karnataka (Mysore State and Kannad speaking areas of Hyderabad State)
4 Maharastra (old Bombay state, Vidarbha and Marathwad areas)
5 West Bengal.

Tamil Nadu was the first state in India to provide public library system through library legislation in 1941. To provide for the establishment of public libraries in the state of Tamil Nadu and the organisation of a comprehesive rural and urban library service therein the Tamilnadu Public Libraries Act was enacted in 1948. The Act was first of its kind in India and was brought into force from the year 1950.

2 PUBLIC LIBRARY SYSTEM IN TAMIL NADU

As per Tamil Nadu Public Libraries Act, Local Library Authorities were constitued, one for the city of Madras and one for each revenue district. Each local library authority forms a separate unit and maintains a district central library. Each district library caters to the needs of readers through various branch libraries. The local library authoritities consist of representatives of elected bodies like municipalities, panchayats and nominated members. The chairman of the local library authority is elected from among the members and he is the

chief executive authority. Each Local Library Authority will have the District Library officer who will function as the secretary of the Local Library Authority.

Every local library authority shall levy library cess in the form of a surcharge on the property tax or house tax at the rate of 5 paise per whole rupee. The government gives to each Local Library Authority a matching grant equal to the amount of cess collected. Out of this matching grant 25% is given in the form of books.

Following are the service units in Tamil Nadu :

Government Units

1	State Central Library, Madras	—	1
2	Kavimani Nilayam Library, Nagercoil	—	1

Local Library Authorities

3	District central libraries	—	15
4	Branch libraries	—	1,459
	Total		1,476

The Connemara Public Library Madras serves as the state central library. This library has 3.20 lakh volumes on its shelves and has 13,700 members. The library also receives one copy of every publication published in India under the Delivery of Books Act, 1955.

The Kavimani Nilayam Library is also functioning under the control of the Director of Public Libraries from August 1977. There are 15 Local Library Authorities at the rate of one for each revenue district having 15 district central libraries and 1,450 branch libraries. It is proposed by the government of Tamil Nadu to extend the Tamil Nadu Public Libraries Act 1948 to the transferred area i.e. Kanyakumari district and Shencottan Taluk of Tirunelveli district.

The libraries provide free service in the premises. Readers have free access to the books.

There are 3,520 persons on the rolls of the library establishment. Government have extended all the concessions as are applicable the government servents to the employees of the Local Library Authorities.

A branch library can be opened in a village with a population of 5,000 and above. Branch library is managed by a full time librarian. A delivery station can be started in villages with a population of 1,000 with the help of a school teacher or other service minded persons who are paid honorarium. Twenty new libraries have been opened during the year 1980-81.

In addition to the above, mobile library service is provided to serve remote villages. Libraries have also been opened in hospitals and jails.

A massive building programme for the construction of suitable libraries has been started. Great stress is being paid on the provision of suitable good quality books to all the libraries. A special scheme "Earn while you learn" has been introduced for the benefit of higher secondary students. There is a provision of institutional membership also.

3 ANDHRA PRADESH PUBLIC LIBRARY SYSTEM

Andhra Pradesh (old Hyderabad State) was the second to introduce library legislation in 1955. The Hyderabad Public Libraries Act, 1955 and Madras Public Libraries Act, 1948 were amalgamated in 1960.

The network of public library system in Andhra Pradesh consists of the following :

S No	*Type of Library*	*No. of Libraries*
1	State Central Library (the apex library)	1
2	Regional libraries	5
3	Research library	1
4	City central Library (at Hyderabad)	1
5	District central libraries	21
6	Branch libraries	790
7	Village libraries with part-time workers	199
8	Book deposit centres	602
9	Panchayat libraries and other aided libraries.	2,315

There is a separate Minister for public Libraries who is also chairman of State Library Committee which advises government on all matters connected with the public libraries. The Director of Libraries is also member-secretary of the committee. He is the Head of the Department vested with powers to contral the affairs of public libraries. He is directly under the control of the Education secretary. Six Regional libraries are managed by the government. At the district level zilla Granthalaya Samsthas have been constituted for the 23 districts. The Librarian, District Central Library is, ex-officio secratary of the Zilla Granthalaya sanstha. He is the district Head for all public libraries in his jurisdiction.

3.1 Financing of Library Services

The library service is mostly financed by the government. The expenditure

on libraries during 1980-81 amounted to Rs. 269.01 lakh. Rs. 176.25 were provided in the state budget and Rs. 92.76 lakh were incurred from the libraries funds of zilla granthalaya samsthas. The library cess is levied at six paise per rupee as surcharge on the house property tax collected by the municipalities and panchayats.

The expenditure on establishment is met from the grants made by government. Special grants are also sanctioned for opening libraries, construction of buildings, etc. The aided libraries are sanctioned grants for purchase of books and periodicals from the State funds and from the funds of zilla granthalaya samsthas.

The details of expenditure of Rs. 269.01 lakh are as follows :

1	Expenditure on maintenance of govt. libraries	Rs.	31.75	lakh
2	Grants to aided libraries	Rs.	3.00	,,
3	Contribution to R.R.L.F.	Rs.	2.00	,,
4	Net expenditure from Library funds			
	Establishment	Rs.	136.04	,,
	Equipment	Rs.	53.23	,,
	Buildings	Rs.	22.26	,,
	Other items	Rs.	20.65	,,
	Total	Rs.	269.01	,,

The Govt. of Andhra Pradesh appointed a committee, under the chairmanship of Shri Gopal Rao Ekhote, ex Minister of Education, in February 1976 to review the working of the Act and to suggest amendments to the Act. Regarding finance the committee suggested as follows :

The government should maintain a separate fund called the State Library Fund to meet expenses for development of library services in the state

A cess at the rate of six paise per rupee on the following taxes be levied and collected by the agencies which collect the tax and be remitted to the state library fund apart from the cess collected on property tax which is being remitted to the respective zilla granthalaya samstha Library Fund 1) Sales Tax 2) Vehicles Tax 3) Land Revenue.

4 KARNATAKA PUBLIC LIBRARY SYSTEM

Public libraries in Karnataka are still in a developing stage. Steps have been taken to streamline the activities of the Department of Public Library in respect of the following as provided under section 36 (2) (b) of Karnataka Public Library Act, 1965.

4.1 Copyright Collection

The total number of books and periodicals received in the year 1980-81 are 927 and 165 respectively. The total copyright collection of the Bureau since its inception is 15,227 books and 6,726 periodicals. The State Bureau of copyright collection started functioning on 21st December 1968.

4.2 State Library for the Blind

State Library has a special braille collection for the blind. The present total collection of the braille books and periodicals is 650 and 60 respectively.

4.3 Inter Library Loan

The Inter library loan system is in progress. Many of the district central libraries and city central libraries have brought out catalogues ao that the network of the inter-library loans could be established.

4.4 State Bureau of Technical Services

State Bibliographical Bureau and Bureau on Technical Services have hot been able to function. Since the implementation of the Karnataka Public Libraries Act 1965 the state of karnataka came into the forefront with regard to the development of libraries and library services throughout the state. At present, the public library system is as follows.

S No	*Type of library*	*No of libraries*
1	State Central Library,Bangalore	1
2	City central libraries	10
3	District central libraries	19
4	Branch libraries	233
5	Service stations	63
6	Mobile stations	64

4.5 Financing of Library Service

The following are the sources of income for thr year 1980-81 :

Cess collection during 1980-81	Rs.	50,00,000
Grants sanctioned to District Library Authories for the year 1980-81	Rs.	19,15,500
Grants by the Government out of consolidated fund (Non-plan Budget)	Rs.	7,88,000
Short term training course in Lib. Sc.	Rs.	63,000
Expansion of library services	Rs.	47,28,000
District Library Authorities : Grant-in-aid.	Rs.	25,00,000
State Library Authority : Grant-in-aid	Rs.	5,00,000
Aided libraries in the state : Grant-in-aid.	Rs.	1,20,000
		10,000
		50,000
Total	Rs.	86,99,000

Since the abolition of octoroi the developmental activities of the library services have suffered. However, efforts are being made to mobilise adequate financial resoureas to meet the overgrowing needs of public in providing comprehensive library services.

5 MAHARASHTRA PUBLIC LIBRARY SYSTEM

Since the implementation of the Maharashtra Public Libraries Act, 1967 the development of public libraries in the state has taken a momentum. Total number of public libraries as on 31st March 1982, is as under. :

1 State Central Library (rests with Asiatic Society, Bombay)	1
2 District libraries	26
3 Taluka libraries	194
4 Other libraries	2,898
5 Government divisional libraries	5
6 Government district libraries in Nagpur Division	8

5.1 Structure of Libraries

The public libraries are recognised and paid grant-in-aid by the Department of Libraries according to the rules framed by the government under the provisions of Maharashtra Public Libraries Act. These libraries are divided in categories according to their book stock, users, etc.

Thesc Libraries are divided in A, B, C, and D classes.

Class	*No. of Books*	*No. of Periodicals*	*No. of Newspapers*	*No. of Members*
A	15,000	50	15	300
B	5,000	15	5	100
C	1,000	5	3	50
D	100	5	3	25

While recognising these libraries, the library is required to be registered under the Public Trust Act or Society's Act. The maximum grant paid to these libraries till last year was 75% of the admissible expenditure incurred by the library in the previous year to a maximum of :

Class	*District*	*Taluka*	*Others*
A	Rs. 30,000	Rs. 16,000	Rs. 12,000
B	Rs. 16,000	Rs. 12,000	Rs. 8,000
C	Rs. ——	Rs. 6,000	Rs. 4,000
D	Rs. ——	Rs. ——	Rs. 1,000

Circulating library is paid Rs. 500.00 for each centre to a maximum of Rs. 200.00. The other benifits extended to these recognised public libraries are :

(i) Incentive grant for reaching the higher category, which is paid on purchase of more books and increasing the subscribers;
(ii) Building grants are paid for errecting functional library buildings.

These grants are paid to a maximum of :

Rs. 75,000 for A class
Rs. 48,000 for B class
Rs. 24,000 for others

5.2 Grants for the Special Purposes

On the recommendations of the State Library Council an amount not exceeding Rs. 10,000 is paid for the special functions and for celebrating special occasions, such as silver, golden and centenary celebrations.

The following table gives the number of public libraries and the amount paid to them as grant-in-aid since the implementation of the Act.

Grant-in-Aid Paid to the Public Libraries

Year	*Number of Libraries*	*Amount paid in Rs. (Lakhs)*
1969-70	574	7.90
1979-80	2,087	45.79
1980-81	2,674	86.00
1981-82	3,118	103.30

Since the year 1968-69, more than 80 libraries have been paid building grants. From the year 1980-81 the ceiling of the grants has been doubled. This will help the libraries to increase their book stock and the number of readers will also be increased. This will also help the libraries to effect increase in the salaries paid to the staff.

5.3 Library Association

The Director is empowered under the rules to recognise one District Library Association for each district and one State Library Association for the whole state. The District Library Association is eligible for a maximum grant of Rs. 1,000.00 every year. The State Library Association is eligible for a maximum grant of Rs. 12,000.00. The Divisional Library Associations are eligible for a maximum grant of Rs. 3,000.00 each.

6 WEST BENGAL PUBLIC LIBRARY SYSTEM

There was no legislation in West Bengal to regulate, guide, control and superwise the libraries, most of which were under private management. For the establishment of public libraries in West Bengal, for effective control over the management of libraries and for their healthy growth in an organised and systematic manner and for grant of recognition to the existing libraries as also to provide for a comprehensive rural and urban library service in the state, a suitable legislation was long being felt. The West Bengal Public Library Act 1979 has its special features.

6.1 Financial Memorandum

On enactment of the Act a directorate of public libraries subordinate to the Government of West Bengal is set up at the headquarter with a small supporting staff and other infrastructure for the purpose of administration. To begin with the expenses for running the directorate will be around Rs. 85,000.00 per annum. When the work gathers momentum it may be necessary to strengthen the directorate and to establish separate administrative machinery at the district level as also at lower levels.

7 ROLE OF ASSOCIATIONS

The Madras Library Association took initiative in creating an atmosphere for library development in the state. The Association struggled hard to achieve the aim of library legislation under the leadership of late Dr. S.R. Ranganathan.

The Andhra Pradesh Library Association gave a call at the first Abdhra desa Library Association Granthalay Mahasabha held at Vijayawada in 1914.

The Hyderabad Library Association formed in 1951 was successful in enacting Hyderabad Public Libraries Act 1955. With the reorganisation of states in 1956 the Andhra Pradesh Public Libraries Act 1960 emerged on the scene.

The leadership of Hyderabad Library Association created a new history, within a short period of 5 years, the aim of legislation was achieved. Hyderabad state owes its debt to Dr. R. S. Ranganathan who took keen interest in the proceedings of Hyderabad Library Association.

Karnataka Library Association in general and Documentation Research Training Centre, Bangalore in particular propogated the cause of library legislation in Mysore state and proved successful in introducing Karnataka Public Libraries Act, 1965.

Maharashtra State Library Association openly accepted the importance of library legislation at the conference held at Sholapur in 1957 and within a short period of ten years achieved the aim. The Maharashtra Public Libraries Act 1967 was the result of untiring efforts made by library workers in the state.

West Bengal Library Association played an important part in introducing West Bengal Public Libraries Act 1979. Indian Library Association is parent body, the Association is celebrating its golden jubilee next year, I request all the delegates representing various states to strengthen the hands of Indian Library Association for all such activities.

Library Legislation in India is a challenge to Librarianship. Librarians and library workers in India should accept the challenge. The dream of Late Dr. S. R. Ranganathan will inspire us to achieve the aim of library legislation in India.

PUBLIC LIBRARIES AND ADULT EDUCATION

C B LIMAYE

1 ADULT EDUCATION : NEED FOR PLANNED EFFORTS

Adult education has been included in 20-point programme. This shows that the Government of India is keenly interested in the programmes of adult education. The guide-lines and useful literature of adult education are supplied by the government agencies like the UGC. At persent about two and a half million adults are attending the adult education centres. During the first year of the VI Five-Year Plan (1980-81) the total expenditure incurred by all states and union territories was less than Rs 8 crores against the annual outlay of Rs. 12 crores in the state plans for adult education. The centrally sponsored scheme of rural functional literacy projects shared the same fate with the result that an amount of Rs 2.32 crores remained unspent from the total annual outlay. During VI Five-Year Plan an amount of Rs 128 crores has been earmarked for adult education and it is doubtful whether with the existing infrastructure, the programme could purposefully utilize all the money available.

2 NATIONAL ADULT EDUCATION PROGRAMME (NAEP)

In the present NAEP we should have some motivating factor for the learners. Programmed learning has shown that the learner acquire confidence at every stage but eventually the progress halts. There has been a total lack of post-literacy and follow-up efforts. The learner seldom applies his literacy regularly owing to lack of reading material and soon relapses into illitearcy. This has been the regular phenomenon ever since our efforts began to eradicate illiteracy but it is seldom given the attention it deserves.

In the effective implementation of this programme, planning plays a very crucial role. Efforts should be made in the right direction. Once Abraham Lincoln was asked, if a tail is to be considered as leg, "can we say an animal has five feet?" "No," said Lincoln adding that the tail should be first converted into a

leg. It suggests that it is the execution of the plan that is of great value and not the professional twist for educating the adult population. In fact, it requires the follow up action and it is in this sphere where the libraries are of prime importance. They will propagate literacy and also act as a catalyst in keeping the adult services alive.

3 THE GOAL OF COMMUNITY DEVELOPMENT

Of the agencies for adult education, libraries are perhaps the most flexible in providing educational service to adults. The objectives of the adult education programme are to impart literacy skills, and to raise the level of social awareness of the most disadvantaged section of the community. Community has but one base, i.e., communication, without which there will be no community. Many people belong to several communities each organised around some set of interests and needs, unrelated to those of their neighbours. In the case of many persons in India, wherever they may be staying, in villages or in cities, but due to their poverty and illiteracy, behavioural abnormalities and various other social disorders, as the result of their status as men without community. Due to the concentration of industries coupled with the job opportunities in the cities, there is a density of population in urban areas and thereby there is increase in slums. In addition, there is now a spurt in idle hours due to power cuts and we find the population aimless, disillusioned and in need of purpose. If they are involved in some kind of activity, in purposeful living, there will be less conflicts.

There is a Chinese proverb "Give a man fish and feed him for a day, teach him to fish and you feed him for life," which sums up the very idea of community development. A look at the brief of a community development worker may show areas where his functions overlap to those of a professional librarian & where cooperation could develop to the advantage of both in their services. Obvious common ground exists, where libraries can give practical support to community development programmes by providing informal service. An illiterate may be taught the three Rs but how to apply them in his practical life is never being taught. Librarian will be the person to go to the public to publicise the facilities and resources of the library through posters, local advertisements, the various media of communications and by such methods as competitions for both children and adults. The mere existence of the benefits created by government for the disadvantaged is not the guarantee for the people taking advantage of them, but the people are to be often told of their rights. Thus the public libraries should be the centres for the dissemination of information and exchange of ideas. Common ground shared by community development workers and librarians is expansive, yet the implications of this fact have not been realised or investigated to any degree. Like community development, librarianship can be seen as a profession having its own special purpose, i.e., provision

of a service to community. Both professions come within the comprehension of people that they served, so far libraries are they must undergo a radical change in the direction of community development. If the public libraries meet the express demands of the minority of the public then they can operate on traditional lines but if they are really intended to serve to all public, then library extension service is going to be required. This extension, service could possibly be provided by the 'outreach' approach bearing on the social problems of the day.

In Britain also libraries were not involved in the preliminary planning stages of the national campaign or the BBC project, as they were not considered significant in such planning. However, the fact remained that more and more libraries were seen to play an important role in the endeavours to increase reading competence. Therefore, it was later realized, when a million pounds grant was spent, that why not spare some grant for collection of materials or technical equipment, such as video records to film television output, in libraries.

4 'OUTREACH THE PEOPLE' APPROACH FOR LIBRARIES

Till the birth of 'outreach' approach, the public libraries were contented in rendering a service when it was asked for. By its definition 'outreach' concept is flexible, as it involves the direction of specifically planned services to a particular group of users. The librarian who is unable to sell the service is not really a public librarian, and he is more like an academic or research librarian whose readers make specific demands and he takes pleasures in satisfying them. The outreach librarian should provide a caring service, he should be able to identify latent needs and to determine how best to serve them. He should sell the idea of books first, explaining their relevance to people 'by reaching out' the people who for some reason or the other never come to the library. Only secondly he is selling the idea of the library, as a possible place to go for a variety of activities.

Where does the 'outreach' librarian begin to look for his invisible clientele? The answer is where there are slums, with living accommodation overcrowded, where education is of the poorest sort, and irrelevant too, where there is alchoholism and violence, income is the lowest, and daily life is a drab. It is surprising that books and libraries should have been given a very low priority, despite the fact that they are very important to people. The mobile service in Britain has proved to be more successful in attracting the readers than was the service operated from the existing branch libraries. In Britain people working with adults have to create their own material often based on 'magazine cuttings' and personal flair, or to rely on the series commercially produced for slow or reluctant readers.

In America, too, the availability of public revenues prompted variety of

public library programmes under the heads : (i) outreach, (ii) library service to the disadvantaged. These programmes enabled the librarians to participate in the national efforts to eliminate the causes of poverty and ignorance and to bring the underprivileged and poor at the stage where they can use the library resources for self development. Motion pictures were used to attract non-readers to the library and there was stress on film as a communication medium. The libraries also started games and manifold cultural activities. There also emerged the concept of the 'street-librarian', by which a librarian gave information from the box of the books on a car parked at curbside. Public libraries in America moved actively to take materials and programmes to the people who were not accustomed to going to the libraries. It became the most economically effective educational institution. For the individual proceeding on his own, it provided materials for his self-education. The public library thus provided information, book and non-book material, supportive, of the individual, and group educational effort.

A survey was carried out by a USSR team of economists headed by S. Strumilin. It revealed that more than a quarter of the annual increase in Soviet national income was the direct result of the rising cultural and educational level of the people employed in the productive sphere. This indicates the need for the rational use of leisure, which Marx called the yardstick of social wealth. Most of the Russians normally devote their leisure time to study.

Public library with its narrow book-oriented outlook, housed in some old fashioned building is the traditional image, and it certainly is the truth in our country. It is because of this that the library is not viewed as a dynamic force. Not only the extended range of material, but also giving total library service and acting as a community information centre, where any individual can get access to information, contributes to community development. The service must be rendered in such a manner that the service reaches the masses. rather than expecting them to come to the library.

Libraries could thus, become centres not for revolution but for changes which could eventually bring us to a more equitable and integrated society.

When people know the facts, they are more apt to strive for the betterment of their life. A skillfully selected and organised collection of books can become an active force for good, in the community when exploited imaginatively. As an example it is suggested that public libraries may follow 'functional literacy week' on different topics given in the Appendix.

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APPENDIX

SUNDAY

An old farmer is dying and his five sons are around him. He asks the youngest to bring all the five sticks which they use while grazing the cattle, and asks him to break it. It breaks, then he asks him to tie the four and to break them together. When all the sons said that they won't break because they are tied together, their father says that is what he wants to impress. If they are united and stay together then any amount of strength cannot break them.

The librarian may thus tell a story next week of Ram and Shabaree to impress upon them that even Ram did not believe in untouchability as he ate the tasted plums.

MONDAY

Mushrooms are becoming popular in our country as a vegetable and for preparing several delicacies. Farmers, unemployed youth and retired persons have taken to mushroom cultivation making good profits from sale of mushrooms.

Mushroom is cultivated in sheds garages, cellers as well as space in the house, if there is good ventilation.

For Compost.

Wheat straw	100 kg.
Wheat bran	10 kg.
Urea	1½ kg.
Ammonium Sulphate	9 kg.
Superphosphate	3/4 kg.
Gypsum	10 kg.

Spread wheat straw and wet thoroughly, add all ingredients, except gypsum, mix thoroughly and leave the heap for a week. Then turn the heap thrice leaving five days interval and always sprinkle water when turning. Add gypsum in three instalments while sprinkling water. This compost will be dark brown in colour and give off a sweet odour of warm grass.

Spawn (mushroom seed) can be obtained from the Mycology Division, IARI, New Delhi 12, or Agricultural University, Pantnagar for Rs. 3 to 5 for half a litre bottle. The wooden trays or boxes of 30 × 15 × 15 cm should be selected after filling them with compost upon nearly 10 cm from bottom. Seeds may then be sown in such 5 to 6 boxes from ½ litre bottle. Allow two weeks,

the temperature of the room should be between 24°C and 26°C. At the end, casing mixture with equal quantity of powdered sand and sawdust should be applied. The leeds should be sprayed with water and the temperature maintained at 19°C.

The first flush of pin heads are visible in 2-3 weeks after casing and small white buttons develop 3-4 days after the pin head stage. The right time to harvest is when the cap is still light over the short stem and it should de done in either morning or evening and preserved in refrigerator if they cannot be sold on the same day.

The nutritive value of mushrooms having high protein and vitamins should be made known to them.

Intensive Agriculture. 19, 11, January 1982

TUESDAY

Agroforestry : a new hope for third world farmers—integration of forestry cultivation of food crops and animal husbandry on the same piece of land can increase total productivity while preserving the ecosystem.

Iraditionally and historically forestry and agriculture are supposed to be competitive and not complementary activities as the forests were cleaned to make room for agriculture. In recent years scattered evidence exists to show that integration of crops and animal husbandry on the same piece of land can increase total productivity. Agroforestry would minimise erosion and the judicious selection of trees, would increase the level of fertility and replace the nutrients taken out by the annual agricultural crops.

The trees like eucalyptus and subabwl are covered under the HDEP (High Density Energy Plantation). Both of them are fast growing and if cut, they give more stumps, better soil and water conservation and eventually more income for the farmers.

A librarian may give this information with statistical data.

Commerce. 145, 3712, 31st July, 1982

WEDNESDAY

In Russia it was found that if the wheat-seeds are dried after soaking into water it helped to increase the crop production. There was 20% increase in the production in Australia, when they had done the same experiment. They are of the opinion that the leaves of these plants give out water very slowly with the result that there is an increase in production. If you soak wheat in pure water for 24 hours at the 20°C temperature and then dry them till the weight equals the weight before soaking the wheat, you will get 15 to 20% increase in production.

In Bhal Mr M J Dosan had experimented the same technique on jowar and got 40% increase in production.

A librarian may also guide his subjects in experimentation through active participation.

Adhunik Kheti. 1, 5; 15 October, 1970

THURSDAY

An impure water is available from rivers, wells, etc., which ought to be cleaned first. It can be made clean, from the solid particles by allowing it to settle at the bottom. You can add clay or alum to the water and let it stand undisturbed; without disturbing take out clean water as much as you can, and then filter this water from sand or rough charcoal powder (i.e., unburnt wood). You have to put this powder in a bag and allow the water to pass through this and thus you can have a clean water.

In the current drinking water decade a librarian will play a significant role by giving this information to the community.

Invention Intelligence. May, 1982

FRIDAY

How organic wastes which make our environment unhygienic, could be converted into useful manure for plant growth.

Every living being that eats, gives out something in the form of organic waste which is harmful as a source of diseases. Flies and other insects can widely diffuse dangerous germs. Human waste should not remain on the streets. But the village people cannot afford the RCC structure, and their maintenance cost. In order to be useful a public latrine should not be fixed to a particular place and it should have a light shelter which can be replaced on a shallow ditch, where waste can accumulate, and when the ditch is full the shade can be shifted to the other shallow ditch. The ditch when filled should be covered for a while and when the waste becomes liquid, it may be spread out in a thin layer, and allowed to dry in sun. If the dried waste is thus mixed with earth with sprinked water for several times, it produces compost. It keeps the dirt outside the settlement and keeps the inhabitants in good health, assuring the community, a small revenue.

In *Invention Intelligence* such type of information is being published in the series, "Immediate education for survival" which a librarian can bring to the notice of the people while outreaching the library services.

Invention Intelligence. July, 1981

SATURDAY

For women, the librarian can give useful information from the *Herald of Health, Invention Intelligence, Home Science*, which contain very many household hints, recipes like daily requirements of soaps detergents, etc.

In one of the issues of *Invention Intelligence* in an article titled "How to save fuel and energy" the economy in preparation of rice is given. Put the water and rice on the gas and let it start boiling, keep it in a flask of thermocol. Put the lid tightly and the rice will be ready within half an hour, this is a very simple experiment saving time, fuel energy etc.

In an article in one of the issues of *Science Digest* it was given that formerly people used soda-bi-carb for having male issues. In family planning programme such type of information will be useful without any harm.

Thus, the problem of scarcity of reading materials for adults can be solved by the librarian with his imagination, foresight and flair for reaking.

PUBLIC LIBRARIES AND ADULT EDUCATION

WAJIH AHMAD ALVI

1 INTRODUCTION

Libraries are the repositories of knowledge where knowledge is organised for use by the living generations and preserved for the posterity. All the types of libraries thus have only one stock-in-trade, i.e., knowledge. This knowledge packaged into different formats is systematically organised for use for education, and further exploitation in research and development. Obviously, all the types of libraries have some educational objectives and the public library is not an exeption.

However, so far as a public library is concerned, by its very nature and scope, it is a library for every citizen. Its clientele includes people from all walks of life who are literate, neo-literate or illiterate. This feature of a public library makes its educational functions more diverse and elaborate. As the adult education is used to designate educational activities designed and operated exclusively for adults, public libraries are more concerned with this facet of education than the other types of libraries which may afford to skip over this sphere of activity altogether.

2 AIMS AND OBJECTIVES OF PUBLIC LIBRARIES

In order to find out the exact role of public libraries it will be in the fitness of things to take note of the aims and objectives of public libraries. The standards for public llbraries available at the international and national levels make abundantly clear the role of public libraries in the life of the community. UNESCO manifesto for public libraries, for example, underlines the following objectives for the public libraries :

1 Education 2 Information 3 Culture 4 Leisure.

The statement of these objectives is further elaborated by detailing the sub-objectives with the principal activities and materials and methods required under

each sub-objective. Here mention may be made only of the sub-objective on education, which it clearly emphasises as "to promote the use of public libraries as educational agencies for the individual."

Similarly there are ALA standards for public libraries which highlight the educational functions of public libraries. According to these standards the public library attempts, "to assist people to contribute to the growth of knowledge, make such use of leisure as will promote personal and social well-being, develop their creative and spiritual capacities, be more capable in their daily occupations, discharge their political and social obligations, become better members of home and community, keep pace with progress in all fields of knowledge, educate themsalves continuously." Obviously, public library accepts the educational function as its primary function.

In short, the public library is a multipurpose agency which serves the community in the fields of education, information and recreation. It also provides social, civic and utilitarian education to the people so that they become better members of home and community. Again since public libraries are for one and all, they are required to offer educational facilities to the adults in their localities; in other words, the adult educational facilities. Here, the phrase adult education encompasses activities that are exclusively for the adults.

It is, therefore, evident that public libraries are, for all intents and purposes, very much concerned with, and involved in, adult education. ALA has been giving considerable impetus and direction to the development of educational services to adults through public libraries. Its Commission on the Libraries and Adult Education (1923-26) and the ALA Board of the Libraries and Adult Education (1926-37) have played a vital role in this direction. Lee is of the opinion that "among the agencies of adult education libraries are perhaps the most flexible in providing educational services to adults." According to him, the provision of these services is based on the following assumptions :

(i) to lead a full and meaningful life, adults need to continue to learn;
(ii) books are the principal means of continuing self-education; and
(iii) adults are capable of continuing self-education.

3 ADULT EDUCATION FUNCTIONS OF PUBLIC LIBRARIES

The public libraries being for one and all take up different adult education functions in different situations. Resources in men, money and materials also contribute quite a great deal to design and operate different adult education activities. However, for their clear understanding, the adult education functions of public libraries can be discussed under two catagories : (a) auxiliary functions; and (b) direct functions.

3.1 Auxiliary Functions

These are those functions which public libraries undertake to support and promote the adult education institution and agencies in their programmes. There cannot be a hard and fast statement of these functions, as they vary in different situations and circumstances, yet generally these functions are as under :

3.1.1 *Provision of Reading Materials*

Availability and provision of adequate reading materials is an essential facet of adult edueation. Though the adult education institutions may, and they usually do, have their own collections, yet the publlc libraries have an edge over them in that they have more diverse collections. Thus, the public libraries are in a position to offer relevant reading materials to these adult education agencies to make their programmes more meaningful. These services may include inter-library loan, provision of bibliographic aids, consultancy in selection and acquisitions and instructions in the use of libraries.

3.1.2 *Provision of Accommodation*

An ideal public library is always centrally located to ensure quick and convenient acces for one and all. Moreover, these libraries have a conducive academic atmosphere, congenial surroundings and adequate reading materials including audio-visual materials. All these features of public libraries render them ideal meeting places for adult education classes and also make them useful for inculcating and sustaining lifelong reading habits among the adults.

Although public libraries also suffer from space problems, it will do well to remember 'where there is a will there is a way.' Make-shift arragements can be made. Public libraries must find and spare reasonable accommodation for conducting adult education classes. This can help them to achieve their basic objectives also as they can have more and more clients and their resources can be exploited better.

3.1.3 *Publicity on Adult Education*

Yet another function of public library with regard to adult education is to publicise various adult education programmes in its locality. As the public library is an institution working all the time against illiterary and ignorance, it is its duty to identify illiterate people, guide them to different adult education programmes and opportunities and offer necessary counseling services to them. As public libraries are public visiting places they are in an advantageous posi-

tion to publicise and popularise adult education and act as recruiting agencies for adult education institutions. Besides, public libraries can take the initiative to act as a channel of communication and coordination between various bodies concerned with adult education.

3.2 Direct Functions

In their own right, public libraries have always acted as educational and cultural centres. They have been organising materials and services to educate people in their day-to-day affairs so that they are able to keep up with developments in their fields of interest. Another educational function of the public library is to act as information centre for the locality it serves.

Although we can not have the exact statistics of the people who are educated in the public libraries, yet certain surveys in some foreign countries have revealed very encouraging facts and figures. It has been found that these silent students who educate themselves through public libraries usually outnumber the students attending regular classes.

In order to participate actively in adult education programmes, the public libraries gear up their services to widen the sphere of their activity and reach more and more people. These services are known as 'extension services' in professional parlance. Usually the following extension services directly take care of the adult education programmes by the library :

(i) Lectures/discussions/debates.
(ii) Reading to illiterate and neoliterate adults.
(iii) Film shows.
(iv) Mobile services to reach dispersed areas.
(v) Conducting adult education classes.

4 STEPS FOR SUCCESSFUL ADULT EDUCATION PROGRAMMES

In order to plan, design and implement adult education programmes in a successful manner, the public libraries must have a sound conception of adult education, understanding of the structure and composition of the community, knowledge of social problems and skill and imagination in planning and directing programmes of adult education. For this purpose the following steps are considered useful :

(i) Determination of adult education needs through surveys and from other statistical sources available in the locality;
(ii) Analysis of these needs to determine which of them the library may and can meet;

(iii) Determination of the services required to meet these needs;
(iv) Publicise and popularise these services;
(v) Regular evaluation of these services to ascertain their usefulness and find out ways and means for their improvement.

5 PROBLEMS

Facts and figures are available in plenty to support the view that public libraries can, and they do, render a great secvice in the field of adult education. But in this context most of the developing countries have a different story to narrate. Public libraries in these countries have not been able to keep a track of the developments in the developed countries so far as the adult education is concerned. And they have their own problems which prevent them from blindly following the practices in developed countries. If the public libraries in India, and for that matter in all developing countries, have to act as adult education agencies, they will encounter their own problems. The most notable of these are ;

(i) Poor image of public libraries;
(ii) Lack of professional training;
(iii) Lack of resources in men, money and materials;
(iv) Lack of proper accommodation; and
(v) Lack of proper management.

The conference would do well to consider these problems and find out their solutions. The following are certain suggesions in this regard.

6 SUGGESIONS

6.1 Library Legislation

It is unfortunate that India still lacks library legislation. Only five states in the country have so far been able to enact library legislation. The draft legislation circulated by the Central Government as far back as 1963 in the light of the Sinha Committee Report has become somewhat obsolete. The professional associations should come forward and mobilize opinion in favour of total library legislation in the country. This done, the public libraries in the country can have a new lease of life and activity.

6.2 Professional Education

I have no hesitation in submitting at this conference that there is enough need and scope to revamp and revitalize our library science education programmes.

Our students at different levels are overburdened with theories and practices that are taught to them but have little relevance in their practical career. We will do well to delete what is obsolete, irrelevent and incorporate modern theories and practices of library and information science.

6.3 Continuing Education

The professional associations should provide a forum for the professionals for continuing education so that those who have had their library education long back can keep up with the current developments and trends in the profession. The library science schools in the country may also organise seminars, symposia and summer schools with the assistance of the UGC as is done in in other fields.

6.4 Professional Literature

Due attention may be paid to produce professional literature on adult education which we lack badly today.

This done, I hope the public libraries in India can gear-up their services and participate actively in adult education programmes to help the country to get rid of the curse of illiteracy and ignorance.

PUBLIC LIBRARIES AND ADULT EDUCATION

N B CHOUDHURY

1 INTRODUCTION

Public libraries, in the past, were vague in their aims. To start with, the objective for establishment of public library service was the preservation of printed materials which were sacred and intended for a few only. Reading of these printed materials was considered as a religious duty. Aims of the public library of modern days are different. Presently, its aim is to provide general education to the public. In the words of Gardner "Public libraries are agencies that speak directly to the people. They help on literacy, foster culture and directly assist the production of book in indigenous languages". Education is the medium for a man by which he can adjust himself in the society. Considering the explosion of knowledge and social economic changes it is imperative for every one to seek education through organised means. Public library is the means through which mass education is possible. Modern democracy, based on adult franchise, depends for its success on universal mass education. So, in order to provide mass education, the establishment of an adequate, number of public libraries is very essential in our country.

Dr. Ranganathan has suggested a Thirty-Year Library Development Plan for India, which includes library legislation at national and state-level to achieve the desired object. He stressed the importance of a nation-wide education and library system as means to securing what he called, 'universal mental awareness' and demanded that for a growing democracy a library system at all levels is absolutely indispensable.

2 CONCEPT OF A PUBLIC LIBRARY

UNESCO's manifesto states, "The public library is a product of modern democracy and a practical demonstration of democracy's faith in universal education as life long process. Though primarily intended to serve the educa-

tional needs of adults, the public library should also implement the work of schools in developing the reading tastes of children and young people, helping them to become adults. Who can use books with appreciation and profit." It further characterizes public library service as one "which is atuhorised by legislation, open to the public without charge and financed out of public funds." We find very few public libraries in our country, which can satisfy this definition, because very many states have not yet enacted public library legislation. Out of 22 states and 9 union territories, only five have enacted Public Library Act. These acts are also at variance with each other. The first effort in this direction was made by Dr. S R Ranganathan in 1930. Madras Public Libraries Act 1948 was the first such act in India. It was followed by Hyderabad Public Libraries Act 1955, Andhra Public Libraries Act 1960 and Mysore Public Library Act 1965. As suggested by Dr R L Mittal the formulation of a national policy on library legislation is essential.

3 NATIONAL ADULT EDUCATION PROGRAMME

Government of India has embarked upon an ambitious National Adult Education Programme (NAEP) on October 2, 1978. It is beyond doubt that the objectives of mass adult education cannot be fulfilled without the active participation of public libraries. Adult education is primarily the responsibility of the state government. The union Ministry of Education and Social Welfare initiates pilot projects and provides supporting services. Many voluntary organisations carry out various programmes of adult education. Adult education has made rapid progress during the Five-Years Plans. The achievement in the field of adult literacy during the period 1961 to 1971 is given in Table 1.

Table 1 : Progress in Adult Literacy

Age group	*1961 Census*		*1971 Census*	
	No. of literates	*No. of illiterates*	*No. of literates*	*No. of illiterates*
15-24	263.3 (35.97)	468.8 (64.03)	430.1 (47.5)	475.0 (52.5)
25-34	192.3 (28.5)	489.9 (71.5)	260.0 (33.9)	500.1 (66.1)
35+	262.7 (22.3)	917.7 (77.7)	366.2 (24.5)	1,126.7 75.5)

Note. Figures in the bracket indicate percentage to total population in that age group.

It is worthwhile to note that the drive against illiteracy is one of the main steps taken by the government to make our country prosperous.

4 PUBLIC LIBRARIES IN INDIA

The growth of interest in the public library as an institutional tool for adult education has been on a remarkable higher key in United Kingdom, U S A and U S S R in comparison with our country. This becomes obvious on a perusal of table.

Table 2

	Item	*India*	*U K*	*U S A*
1	Population	600 million (post-1971 census figure)	55 million (1971)	159 million (1967)
2	Literacy	36% (1980)	100%	99%
3	Total expenditure on education p. a.	Rs. 11,000 million (1971-72)	Rs. 8,739 million (1970-71)	Rs. 38,33,700 million (1970)
4	Annual expenditure on public facilities library	Rs. 30 million	Rs. 6,000 million	Rs. 12,480 million
5	Number of public libraries	53,554 (1973)	11,500 (1969)	10,459 (1966-67)
6	No. of citizens per 100 registered with public library as borrowers	.01	37	25

The public library is a popular institution of masses, exhilarating democratic atmosphere. Here every one can think freely on any topic without being apologetic. It offers the refreshment of romance to tired workers and give latest information about his craft. We can say the object of library is informal education. In order to provide mass education public libraries in our country should be planned and established on proper lines. From table 2 it is clear that the number of public libraries functioning in our country is indaquate to provide proper library service to our teeming millions. The percentage of literacy is also very low.

Progress of every nation depends upon mass education. If the people are literate, they shall be aware of the activities of their government. Hence, they cannot be led like dumb cattle. If, otherwise, the majority of the people would not know how they are governed; then, they cannot watch the activities of the government. There is no doubt that the political and economic evils of the country are responsible for the ignorance of masses. Lenin said, "There is impossibility of financial progress, cooperation and civilization unless the masses are literate." So, the great effort was made by the Soviet Government to remove illiteracy. Soviet education department made great effort for the development and growth of libraries. By this measure, many people were made literate within a short period.

In our country, a beginnig was made in Baroda to organise a network of libraries. Baroda Central Library was the largest in pre-independence days. The State scheme has rendered an invaluable service to the cause of mass education. Considering the literacy percentage of our country which is only 36% (in 1980) proper public library service is very essential to remove illiteracy. Literacy according to Mahatma Gandhi, is not the end of education nor even the begining of it. It is only one of the means whereby men and women can be educated. The education that aims at making them concious of civic rights and duties must be a continuous process.

5 PLANNED DEVELOPMENT OF ADULT EDUCATION

Adult education has made progress during the various Five Year Plans. The increase registered in the number of literates during period 1961 to 1971 has been shown in Table 1. The plan outlay for adult education has been raised. Adult education is primarily the responsibility of the state government. The union Ministry of Education and Social Welfare initiates pilot projects and provides supporting services. Emphasis in adult education programme has shifted from adult literacy and functional education to the environmental and occupational needs of the learners and the development needs of the society. The functional education programme in the Fifth Plan, therefore, includes : (*a*) Farmer's Functional Literacy Programme; (*b*) Polyvalent Adult Education Centre; (*c*) Non-formal Education Programme for the age group 15-25.

The aim of Farmer's Functional Literacy Programme is not only to acquire literacy but also to increase the productive potential and thereby agricultural production.

Polyvalent Adult Education Centre conducts a variety of integrated vocational-cum-general education programme for groups of workers in the organised and unorganised sectors. These programmes are drawn up on the basis of specific needs of particular groups of working adults and are held at a time and place convenient to the learners.

The non-formal education programme comprises knowledge of the living environment and how the young can adjust it to life conditions, education, health and hygiene, literacy skill and initial functional training leading to employment and self-employment. The age group catered for is 15-25.

Further, the Government of India has also established the Raja Ram Mohun Roy Library Foundation for strengthening the public library movement in the country, especially in the rural areas. Apart from the initial capital grant made available by the Government of India for this purpose, special grants are sanctioned by the central and state governments from year to year. The Foundation gives financial help for mobile library service and bears the rental charges for the buildings hired for village libraries.

For providing adult education active cooperation of social organisations, trade unions and library associations is essential. In this connection, I V Malhan says, "If the library movement and adult education is started everywhere in close relation with trade unions and social organisations co-operation will prove to be boon for our nation." Rate of literacy, number of public libraries, number of books published are some of the yardsticks by which the real planned development of a nation or country is appraised. A concerted drive should, therefore, be made for public library development, if necessary by budgeting more funds in the government grants.

6 SUGGESTIONS

In view of the low literacy percentage (36%, see Table 2) in our country and poor development of libraries it is necessary that certain steps are taken in the following directions :

(i) Library legislation:—Finance is the major constraint which hinders the progress of all programmes. So suitable financial system should be evolved for proper working of public libraries. By library legislation the regular provision of public funds can be assured. Dr S. R. Ranganathan has rightly remarked,"To take away public fund permanently even a fraction of it year after year for a particular service should necessarily have legislation sanction." Anything based on legislation is more stable. It is, therefore, imperative that the public library finance should be legislation based.

(ii) Public Libraries Act should be enacted in all states for proper public library development.

(iii) Suitable budget allotment for public library is essential

(iv) Systematic network of public libraries with their branches in all villages should be set up. Professional associations should arrange library seminar, conference, book festivals, etc., in order to make people literacy minded.

(v) Before enancting public library act in any state the merits and demerits of Public Library Acts of Tamil Nadu, Andhra Pradesh, Karnataka and Maharashtra should be take into account.

(vi) Establishment of a full-fledged Directorate of Public Libraries under the Act is suggested and it should be headed by a full time professionally trained Director of Libraries.

(vii) Library is a growing organism. So the library revenue should be elastic in nature.

(viii) Act should provide the recruitment of professional staff for functioning libraries.

(ix) Persons in-charge of public libraries should be acquainted with the needs and requirement of the people of that locality. Books and other reading materials should be procured accordingly.

(x) The public libraries engaged in programme of continuing adult education must maintain standard and quality.

(xi) Only a few libraries are provided with special funds for adult education services. It seems that more effort should be made to give adult education activities a definite place in the library budgets.

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PUBLIC LIBRARIES IN GOA

M D LONKAR

1 INTRODUCTION

The territory of Goa, Daman and Diu and remained under the Portuguese regime for nearly 430 years. As a result of this, the people of the territory remained neglected for a prolonged period and there could not be any appreciable progress in the field of education and social uplift. This state of affiairs continued till 19th December, 1961 when the people of Goa, Daman and Diu got themselves liberated from the imperialism of Portuguese rulers and became an integral part of India, the country of their own for which they were longing for generations together. Since then there has been considerable development in this territory.

The terrritory of Goa, Daman and Diu comprises of three main districts, viz Goa, Daman and Diu which are situated at a far off distance from each other. The Goa region is situated on the border of Maharashtra and Karnataka states, whereas the regions of Daman and Diu are situated in the state of Gujarat, again at a far off distance from each other. The territory comprises 13 talukas with 13 towns and about 417 villages. The rate of literacy in Goa is very high as compared to other states of India.

The geographic and political conditions of Goa are quite different from those of the other states of India. It is neither a big state nor does it have a big population. It is a small state with a slender population scattered all over Goa and seperated from each other by rivers, valleys and mountains. It is densely populated at certain places and too thinly in other parts, some of which are difficult to reach.

2 DEVELOPMENT OF LIBRARIES

2.1 CENTRAL LIBRARY

Whatever may be the political constraints, the Portuguese rulers do deserve

compliments for two things : (i) for introducing the first printing press in the sub-continent of India in 1556, and (ii) for starting the first public library in Goa in 1817.

The Central Library, Panaji is one of the oldest libraries of modern India. It was set up by the Portuguese rulers. The library was then named as Bibliothech National. It was renamed as Bibliotheca Publica in 1836 and in 187I it was renamed again as Bibliotheca Publica De Nova Goa. Again in the year 1897 it was redesignated as Bibliotheca National De Nova Goa and given the status of the National library of Goa by the Portuguese regime. After liberation of Goa, i.e.; in the year 1961, the library was renamed as Central Library, Panaji.

The Central Library, Panaji, receives books under the copyright act. Its collection is of about one lakh volumes in Portuguese, English, Marathi, Hindi, Konkani and other languages. Prominent among them is the Portuguese collection which is very old and quite useful to the research scholars. The library has a good collection of manuscripts and rare books and the library has built up a section of 'Goalogy' i.e., the books on and about Goa and the books written by the 'Goan' authors.

Besides the usual lending and reading room facility, there is a children's corner also in the library. The library had started a mobile library service for the benefit of the villagers in Goa in 1973, but it was discontinued after few years, i.e., in 1980.

2.2 Taluka Libraries

Presently, there are three taluka libraries which were started recently and are managed by the Central Library, Panaji.

2.3 Municipal Libraries

There are about six municipal libraries in Goa which are managed by the respective municipalities. These are functioning at Panaji, Madgoan, Mhapsa, Vasco, Ponda and Daman.

2.4 Private Libraries

There has been a considerable interest in setting up of private public libraries since long. The first recorded attempt in this direction dates back to 1889 when a librarry was set up at Marshel, a village. It was called as Saraswat Vidyapeeth Pustakalaya. It continued for nearly 25 years. This had given inspiration to establish more libraries at different places. Most of them were short-lived. A very few libraries could survive. Prominent among them are the following libraries :

(i) *Shri Mahalaxmi Prasadik Hindu Vachan Mandir, Panaji.* This is the oldest private library, which could withstand the oddities under which the libraries have to grow. It was started in 1907 by one minority among Hindus. The library has a reading room and a lending section, too. Besides, the library has arranged a number of lecture series in Goa. The library intends to celebrate its golden jubilee this year.

(ii) *Shri Durga Vachan Mandir, Mhapsa (stated in 1908).* The Portuguese rule forced the closure of the library in 1954. It was started again in 1962, after liberation.

(iii) *Gomant Vidya Niketan, Madgaon (started in 1912).* Besides library activities, this institution, too, is arranging lectures of outstanding personalities since long.

(iv) *Saraswati Mandir, Panaji (started in 1913).* The library is situated in a recently constructed building with a spacious reading hall. This is the first private library which has introduced library classification and card-catalogue on modern lines for the use of its readers.

Besides these libraries, there are about twenty-three public libraries in Goa. Noteworthy among them are the Maharashtra Information Centre Library, Panaji, and Rashtrabhasha Granthalaya, Madgoan (1962).

3 LIBRARY LEGISLATION

There is no library legislation in Goa as yet, though both the neighbouring states, i.e., Karnataka and Maharashtra have introduced the Library Act in 1965 and 1968 respectively. With introduction of library act in these states a good network of library system is spread in both these states through their respective directorates of libraries. As a result of this the library activity has reached to the villages there.

A few efforts were made to introduce library act in Goa too, but all of them were abortive.

Since education comes under the purview of the state governments, it is for them to pass the library act and develop library activities in the states. Unfortunately, the importance of library activity has neither been realised by the Government nor by the Library Associations nor by the intellectuals and social workers of the territory.

If the Library Associations in Goa can instil library awareness among the masses, it will not be too far to have a library act in Goa on the model of library act drafted by Padmashri late Dr S R Ranganathan and the library acts that are in force in the neighbouring states, i.e., Karnataka and Maharashtra.

4 THE ADVISORY COMMITTEE

The Advisory Committee for Libraries, (1958) generally known as Sinha Committee, which was set up by the Government of India, has thoroughly discussed the set-up of effective library system. Its major recommendations are as follows :

1 State government should enact comprehensive state library law.
2 The library pattern in the country should consist of National Library, State Central Libraries, District Libraries, and Block and Panchayat Libraries.
3 It should be desirable to have an independent directorate of libraries in every state. Whenever on account of any special local circumstances this is not possible, the state government should have at least one whole time senior class I officer of the rank of a Deputy Director of Education.
4 Every Panchayat should have a library.
5 Library associations are essential to the development of library movement, and the state government and the Government of India should eoncourage the development of active library associations.
6 In technical matters a librarian should be required to take orders from a professionally trained librarian.

The committee has elaborated the library development structure. The various activities which are mentioned therein are the Directorate of Libraries, State Central Library, District Libraries, City Libraries, Taluka Libraries, Block and Village Libraries and Mobile Libraries.

5 EXPERT COMMITTEE

The Government of Goa, Daman and Diu had appointed an "Expert Committee on the Problems and Prospects of the Central Library with a Plan for the Public Library Structure." The chairman of the committee was Professor K S Deshpande, the Head of Department of Library Science, Karnataka University. The committee submitted its report to the government in January 1980. It is under consideration with the government since then and as such no steps have so far concretized to strengthen library development in Goa.

6 LIBRARY BOARD

Prior to this committee the government had constituted the State Library Advisory Board for the Central Library which is now dissolved and replaced by

a new State Library Advisory Board constituted in June 1982 under the chairmanship of the Lt. Governor of Goa. Let us hope now for some better library development activities.

7 READING HABITS

Much stress is being given on literacy drive in the Twenty-Point Economic Programme of the Government of India. In the wake of this programme, lot of attention is being paid to open more and more primary schools as well as adult education centres throughout the country so that every child as well as every adult of the country can be made literate. But the opening of more and more primary schools and adult education centres alone would not serve fully the purpose of literacy drive. In order to keep their literacy alive and in order to develop their urge for knowledge-seeking, reading habit is to be inculcated among both the groups. These habits can be inculcated through an effective library system only. Hence the need of library awareness among the masses and the need of more and more library facilities in the schools, adult education centres and public libraries in rural as well as urban areas of the country.

8 LIBRARY ASSOCIATIONS IN GOA

1 The Gomantak Granthalaya Sangh is the prime library association of the territory. It was founded in October 1963. Immediately thereafter the Sangh had held the library conference of the Maharashtra Granthalaya Sangh in Goa in 1964. Besides this, it is conducting certificate course in library training during summer vacation every year since 1965. The examination of this course is conducted by the Director of Libraries, Maharashtra, and the certificate is also awarded by him.

2 The Indian Library Association (founded in 1933) had opened its branch in Goa in 1976. This association has yet to prove its existence in Goa.

9 FUTURE OF PUBLIC LIBRARIES IN GOA

The Library Advisory Committee (1958) and the Expert Committee on the Problems and Prespects of the Central Library Plan for the Pubic Library Structure, Goa (1980) have strongly recommended a library system with Directorate of Libraries at its apex. This directorate has to look after the development of government public libraries and also to encourage and strengthen the private public libraries by providing suitable grant-in-aids, technical advice and supervision over their activities.

Presently, the curator is looking after the welfare of state public library and its taluka libraries. In fact, he should be given an independent status of the

Director or Deputy Director and assigned the work of strengthening the public library system both at government and private level.

The Central Library, Panaji has yet to get a State Librarian. It is the oldest library of the territory and it serves as a very good reference library for the research scholars. It has set up three taluka libraries after liberation and eight taluka libraries are yet to be established. There is no city branch of the library so far.

The mobile library service is required to be re-introduced for the benefit of the people of Goa.

There are no district libraries in Goa. There is good scope to open district libraries at Daman and Diu. Not only so, the government may think of opening the sub-district libraries at Panaji and Madgoan by de-centralizing the activities of the central library.

Presently, about fifteen village libraries are run the Government of Goa, Daman and Diu and it is intended to open ten village libraries every year. Though this rate appears to be low, one should feel happy that at least some beginning has been made in this direction. If the literacy drive is to be made a success, library facility is to be spread all over Goa and no village is to be left unattended in this regard.

The recently constituted State Library Advisory Board may give lead to the library development activities in Goa by establishing forthwith an independent directorate of libraries and by enacting Library Act at the earliest. As an alternative, looking to its size and population if whole of Goa is treated as a single unit and considered as a metropolis, library development activities can be commenced on the lines of Delhi Public Library which caters to the need of the metropolitian city of Delhi.

10 CHANGING CONCEPTS OF A LIBRARY

The vistas of knowledge have grown so vast that the curious readers find it difficult to collect information which might be traceable within the libraries or elsewhere. Hence dissemination and retrieval of information becomes an integral part of the library activities. The extent of this activity has become so prominent now that the libraries are being called as libraries and information centres. These libraries and information centres are the treasures of knowledge, the source material of which is usually in the form of films, filmstrips, microfilms and microfiches. Another form of source material which is becoming widely popular now-a-days is the records and cassetts wherein live voices of the beloved leaders, authors, or artists can be heard. Similarly the video-cassetts of educational and informative films are also becoming increasingly popular wherein the knowledge can be visualized more effectively. It may not be feasible to provide all this source material to all the libraries, but periodical programmes

of this source material in small and rural libraries can be arranged, so that the readers can read, listen and see the library material in its various forms.

Thus, the entire concept of a library has now changed. The readers do not go there only to read and borrow books, but to attend to the lectures and discourses of the learned persons through lectures series, as well as display of records, cassetts and video-cassetts. This enhances their quantum of knowledge through such library activities and the library becomes the live centre of social activity where the masses are provided with thought-provoking ideas hidden in different forms of library source material.

11 CONCLUSION

The libraries play a vital role in the development of economy and social uplift. The effective public library system through a network of libraries all over the territory, proper utilisation of modern source materials, viz., the books, newspapers, magazines, filmstrips, microfilms, microfiche, records, cassetts and videocassetts for the benefit of the masses; and converting the libraries into social activity centres will certainly make our people more enlightened and better citizens of India. It is a long long way to traverse but certainly not beyond the reach.

The territory of Goa, Daman and Diu has some unique features. It's rate of literacy is very high, its area and population both are limited and the people are sociable. Hence it can yield better results if an effective library system is introduced through out the territory.

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PUBLIC LIBRARIES IN JAMMU & KASHMIR : A REVIEW

NOORUL HASAN KHAN

0 INTRODUCTION

Public libraries caught the imagination of the people of Great Britain and the Scandinavian countries in the late 19th century. It was in Great Britain that the first Public Libraries Act was passed by the Parliament in the middle of the 19th century. Much progress in this direction has since been made in these countries and the United States of America. Public libraries are now regarded as an important instrument of mass education in these countries. Unfortunately their position in India in general and in Jammu and Kashmir in particular is far from satisfactory. People have not yet realised their importance. Consequently majority of the people of the country continue to be denied the benefit of literacy, the highest gift of civilization. We have got the humiliating distinction of contributing nearly half of the entire world's illiterate population.

1 WHAT IS A PUBLIC LIBRARY ?

In India the phrase 'Public libraries' is used in a very loose sense. It is used to denote any library which permits members of the public to use its collections for reference or borrowing on payment of fees. The result of this loose usage has been that the figures about public libraries published by UNESCO indicated that India was leading the world in public libraries. But this is far from the truth.

The internationally accepted definition of the public library is that it is a library (i) which is financed for the most part out of the public funds; (ii) which charges no fees from readers and yet is open for full use by the public without distinction of caste, creed or sex; (iii) which is intended as an auxiliary educational institution providing a means of self education which is endless;

and (iv) which houses learning materials giving reliable information freely and without partiality or prejudice to as wide a variety of subjects as will satisfy the interests of readers.

Public library has been rightly called as 'a people's university' because when properly developed these play an indispensable role as community centres for education, information, recreation and culture. These libraries provide the citizen the documents or information he needs for his responsibilities as a citizen and individual. These also organise discussion groups, film shows, talks, exhibitions, etc. to stimulate his interest in topics which require thought and attention.

Robert D. Leigh, in his book "The Public Library in the United States", while discussing the role of a public library as a social institution, summarises its overall objectives as follows :

1 To assemble, preserve and administer books and other related educational materials in organised collections, in order to promote, through guidance and stimulation enlightened citizenship and enriched personal lives;
2 To serve the community as a general center for reliable information; and
3 To provide opportunity and encouragement for children, young people, men and women to educate themselves continuously.

UNESCO in its Public Library Manifesto (1949) called the public library as a 'living force for popular education.' About the role of such a library the manifesto stated that :

'the public library is a product of modern democracy and a practical demonstration of democracy's faith in universal education as a life long process;

and that

'it should be active and postive in its policy and a dynamic part of community life. It should tell people what to think but it should help them to decide what to think about'.

2 NEED FOR A PUBLIC LIBRARY

Education of the individual is essential for the development of his mind and capacity to make sound and mature judgements and thus function as an enlightened and well informed citizen. Though the importance of formal education through schools, colleges, universities, etc. in this context needs no further

emphasis, yet this alone is not sufficient for the overall development of one's personality. 'Informal education' or 'self education' occupies a very significant place in ones life simply because the process of education does not end with one's formal education, rather real education begins at the point where formal education ends. The process of self education is a life long process and requires no class room attendance. A public library undoubtedly is the most suitable institution for this purpose simply because it is an essential part of one's life.

The need for public libraries has become all the more essential during the post-world War II years because of the spread of democratic or socialist form of governments in many countries of the world. Such governments are based on the theory that sovereign power rests among the voters. He has the responsibility not only to choose his representatives to govern him but also to watch that these representatives discharge their duties in the best interest of the people of the country and even the world at large. To exercise his duties and rights in a proper manner each voter should have access to public libraries to obtain correct and good knowledge about various aspects.

It is wrong to believe that only literates can benefit from public library service and that establishing public libraries in localities with large percentage of residents being illiterates is not wise. This is a fact that illiterates do not know reading and writing but it is generally noticed that most of them are intelligent and have capacity to evaluate various issues of local and national importance. They have good common sense and provided with required information they can take active part in various matters as citizens and in their vocational pursuites. For this purpose public libraries would be required to organize various new activities such as :

(i) reading out books, periodicals or newspapers to the illiterates and neo-literates at convenient hours every day;
(ii) to use audio-visual materials for the purpose;
(iii) to arrange discussions among them on various matters after they have been exposed to facts or ideas under (i) and (ii) above; and
(iv) to arrange dramas, poetry recitations, etc.

3 NEED FOR LIBRARY LEGISLATION

Library legislation is a *sine qua non* for the development of the public library system in any country. A look at the library map of the world will convince that the development of the public libraries in many a countries has been achieved through library legislation alone. Late Dr. S R Ranganathan; L. R. McColvin and the Advisory Committee for Libraries in its report of 1959 pleaded for library legislation.

We may, in brief, examine the need of library legislation.

Dependence on public generousity cannot make the services adequate to the requirements. Isolated actions by few individuals or municipalities will make the growth of public libraries haphazard. The services will be subject to violent fluctuations. In order to have the best library services, libraries must develop according to uniform pattern throughout the country. A uniform and permanent public library service can be achieved by the establishment of a network of libraries throughout the country on a statutory basis.

To provide better public library service to the people sufficient and permanent source of income is essential. Donations from rich people or some societies, etc. cannot provide a permanent source of income. It is essential that the fund should be raised from the public through library cess. This can be done only by legislation. If people will contribute something in the form of library cess it will become obligatory on the part of the government also to contribute something towards it. Both Dr. S R Ranganathan and the Advisory Committee for Libraries have suggested the method of cess and a provision from the general fund of the State.

Library legislation will clearly state how the funds are to be raised and spent, and also who will collect them.

Library legislation is necessary for a network of libraries in the country. If we leave their development in the hands of individuals they may not be established and even if they establish them they will differ from one another in every respect.

There is a proof that public libraries will not be established throughout the country without legislation. The present state of affairs is an example of the same. It is through legislation that we will have a network of public libraries. State central library being at the apex and then district libraries and their branches in cities and villages.

Uniformity and standards in library service can also be obtained through library legislation otherwise there will be a very good library for a small district with a few thousand whereas another district with more population may have a library service for name sake only.

We will have uniform rules and regulations with regard to public libraries only through legislation.

Library legislation is also necessary from the point of view of cooperation.

Library legislation will open the doors of public libraries to one and all irrespective of caste and creed.

4 ATTEMPTS FOR LIBRARY LEGISLATION IN J & K.

Long back Professor P N Kaula, drafted a bill for the purpose and presented it to Sheikh Mohammad Abdullah, but no action could be taken on it.

At present there are two libraries at Srinagar and Jammu called Sri Pratap Singh Library, Srinagar and Sri Ranbir Singh Library at Jammu, each having a collection of about 40,000 volumes. Then there are district libraries, tehsil libraries and lending depots.

The condition of these libraries is far from satisfactory. Buildings are not suitable. There is hardly any good furniture, few trained staff and very meagre grants. Some of the libraries and depots are functioning in unhealthy houses which may crumble any time.

In view of the above and also because of the keen interest of late Sheikh Mohammad Abdullah in their improvement and development on proper lines, the Government of Jammu & Kashmir vide Government Order No. 1867 GD of 1975, dated 18th Sept., 1975 appointed a committee with Dr. M S Randhawa the then Vice-Chancellor of Punjab Agricultural University, as chairman and the author of this paper as one of the members to go into the working of the department of libraries. . . and also to recommend improvements which were necessary to run the department on scientific lines. Some of the recommendations of the committee are given below :

1 *Library Legislation*

Library legislation is the very basis for the development of a public library system. It alone can ensure free library service, adequate funds, and maintenance of proper library standards.

A library legislation for the state, on the pattern of Tamil Nadu was recommended.

2 *Funds*

Funds for the continuing operation of library system should be provided through the library cess of 5 paise per rupee on property tax, supported by regular government grants, and from other donations. Without guaranteed funds and grants, the libraries can again become the same fossilized institutions as before.

3 *Strncture of Public Libraries*

The following structure for the public library system was suggested:

1 State central libraries at Jammu and Srinagar;
2 District libraries in all the 10 districts;
3 Tehsil libraries;
4 Block libraries; and
5 Village libraries.

In addition to the above there should be mobile library vans attached to each central library to provide library service in remote areas.

Besides the above recommendations the committee also made various other recommendations such as : about the functions of the library department; who should be the Head of Library Department; what should be the rights and duties ot the Head of the library department; other staff, the state central library; composition of the library committee; the district libraries; and what should be the staff strength and pattern of staffing for the state central library and other libraries.

The above recommendations were submitted to the Chief Minister by Dr. M. S. Randhawa, Chairman of the Committee. Due to one reason or the other the Government has not been able to enact library legislation as yet.

Recently a dynamic man and scholar Director of Libraries, Archives and Museums in the person of Professor Peerzada Ali Mohammad has taken over. He has been studying the report very carefully and other relevant material on library legislation. On June 16, 1981 Professor P. B. Mangla, President of the Indian Library Association had detailed academic discussions with regard to the various recommendations on the subject. It is hoped that the Jammu and Kashmir will soon follow West Bengal where the latest library legislation has been enacted.

PUBLIC LIBRARIES IN MAHARASHTRA : THEIR ROLE IN ADULT EDUCATION PROGRAMME

M B KONNUR

1 INTRODUCTION

The idea of education as a lifelong process has been expressed by philosophers and educators through the centuries, as it is a fact that lack of education is the root cause of superstition, squalor, ill-health, backwardness and parochialism. In spite of the existence of institutions of formal education like schools, some individuals in many societies get deprived of the formal schooling at their educable age; hence the necessity of adult education in a good number of devloping countries.

It is true that the concept of adult education has had different connotations in different countries. The Americans think of it as a means of learning new vocations and making new adjustments to life; of preserving mental health and morale, and of increasing intellectual and spiritual capacity. Though in the Indian context, the above connotation also holds good, the fact that even after thirty-five years of independence, the number of illiterates in the country is 44.58 crores (63.83 per cent of the total population) cannot be so easily overlooked. Definitely, adult education will mean different thing to India than to the United States.

2 OBJECTIVES OF ADULT EDUCATION

Whether it is in countries like the United States or India, adult education should have certain objectives such as :

(i) to provide functional literacy education for adults who have never had the advantage of any formal education;
(ii) to provide functional remedial education for those young people who prematurely dropped out of the formal school system;

(iii) to provide further education to different categories of persons who completed formal education in order to improve their basic knowledge and skills;
(iv) to provide in-service, on-the-job, vocational and professional training for different categories of workers and professionals in order to improve their skills; and
(v) to give the adult citizens the necessary aesthetic, cultural and civic education for public enlightenmnet.

How to fulfil these objectives? Certainly, some agencies concerned with the education of mature people are essential for this purpose. These agencies include institutions imparting formal education such as schools, colleges, universities; labour unions, industries, voluntary associations, churches, various media of mass communication such as radio, television, films, and libraries etc.

3 ROLE OF PUBLIC LIBRARIES

In considering a public library's role in adult education, it can be said that the relationship between a public library and adult education is based on three assumptions, viz., that (i) adults can learn; (ii) they do learn; and (iii) the library is in a strategic position to help adults learn.

What objectives a public library should try to fulfil in adult education? L. R. Wilson[1] thinks that a public library should furnish an individual materials and personal guidance adjusted to his needs. Such materials and guidance an individual will find useful in his occupation, in understanding the current scenario of the world around him, in adjusting himself properly to the social and political life and finally in understanding himself.

Getting back to the state of affairs in India, a reference has already been made to the fact that in India the number of illiterates is much more (63.83 per cent of the total population) than the literate people. To remove illiteracy to some extent, the Government of India has launched the National Adult Education Programme (NAEP, as it is called) on 2nd October, 1978—the 109th birth anniversary of Mahatma Gandhi, the Father of the Nation. This massive programme, for which Rs. 200 crores have been earmarked, aims at providing adult edcuation facilities to cover about ten crore illiterate persons in the age group of 15-35 within the period from 1978-79 to 1983-84. Besides providing basic literacy, the programme also aims at upgrading the functional skills and creating social awarness among the illiterate persons.

In the remainder of this paper, an attempt has been made to show what role public libraries in Maharashtra can play in the NAEP and how they can help in this giant campaign.

3.1 Public Libraries in Maharashtra

It may be recalled that Maharashtra is the fourth state in the country having library legislation. The Maharashtra Public Libraries Act which was passed in 1967 defines a public library as that which is recognized by the Director of Public Libraries of the State for grant-in-aid purposes. On 31st March 1982, there were 3,120 such libraries in the state functioning at different levels such as region, district, taluka and village. Taking into consideration the number of villages (35,778) and people living there (65 per cent of the total population), one has to accept that the number of libraries is inadequate for the purpose of adult education.

3.2 National Adult Education Programme

The National Adult Education Programme (NAEP) is carried out in the state by three bodies, viz., the state government, the University Grants Commission though the universities and colleges in the state and the voluntary-organizations. Surprisingly enough, public libraries do not find any place in the NAEP as the agencies of adult education, though they have been entrusted with the follow-up work. It is regrgtted that both the NAEP Statement and the Draft National Policy on Education, 1979,did not assign a due role to public libraries in adult education. As a matter of fact, it is the public libraries which are the real effective agencies of adult education since they are viewed by people as 'community centres.' The following are some of the functions which they may be entrusted in this programme :

(i) They may help adult education organizations by making available accommodation suitable for the use of the classes and groups of students. As a matter of fact, they are the excellent seats for adult classes as they are usually centrally located, having the right type of atmosphere and essential books ready at hand.

(ii) They can function as communal, educational and cultural centres by arranging lectures, discussions, film-shows, drama performances, exhibitions, folk-festivals, etc.

(iii) One of the reasons why literacy programmes in the country have failed in the past is the non-production of suitable reading materials for the neo-literates. Education and learning are the life-long processes; as such, without the facility of continuing reading, neo-literates are likely to relapse into illiteracy in course of time. Although the job of preparing suitable reading and other materials is to be assigned to such people who understand the needs, psychology, habits, etc., of the adults living in the

rural as well as urban areas, distribution and/or circulation of such materials is to be entrusted to a system of public library service.

(iv) Particularly for neo-literates, public libraries, can conduct reading improvement courses. Neo-literates will find such courses useful in keeping up their reading habit. If the simple and suitable reading materials are made available to neo-literates, they can develop their reading habits by attending such reading improvement courses.

(v) Though the concept of rural newspapers is not so familiar in India, there are newspapers published at the district and *taluka* levels. Reading of these newspapers by the library staff to the neo-literates will also attract these people to the library. In spite of the fact that state or national-level papers are received rather late, in the remote places, reading of these papers will enlighten people on the problems of national importance.

It is worth mentioning that public libraries have been included in the follow-up work in the NAEP. So far as Maharashtra State is concerned, 85 libraries for each and every district have been sanctioned for the benefit of neo-literates. The total expenditure on those libraries during the year 1981-82 was Rs. 6.18 lakh; for the year 1982-83, the provision of Rs. 6.30 lakh has been made for the same purpose. So far as the centres run by the universities and colleges are concerned, the University Grants Commission has recently sanctioned an amount of Rs. 5,000.00 for each centre, out of which Rs. 4,000.00 can be spent on the purchase of books and journals. It is hoped that all these centres, run by either of these agencies, will make good use of the amount for the purpose.

3.2 Staff

One thing cannot be overlooked; the persons working in these libraries – public libraries or the libraries attached to the adult education centres—do not get adequate salaries. Because the pay-scales of the library personnel in public libraries were poor, the Government of Maharashtra in July 1973 appointed a committee under the chairmanship of Mrs. Prabha Rao, the then Education Minister. The Government has not taken any decision in the matter as yet. So far as the libraries attached to the adult education centres are concerned, only an amount of Rs. 10.00 per month has been provided as the part-time remuneration to the person doing the library work. It is difficult to accept that people getting such an abnormally low remuneration can provide proper services to their clientele.

It will not be out of place to expect that the government would take some measures to provide better remuneration to the people working in public libraries. Once it is so, it is hoped that these people will try their best to make

the NAEP a grand success and the dream of the planners of NAEP to produce a society of such citizens who will be literate and aware of the outside world will come true.

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PUBLIC LIBRARY AND ADULT EDUCATION

NANDA DULAL BASAK
BINOD BIHARI DAS

1 INTRODUCTION

Illiteracy is the most acute problem in India. Since independence the literacy rate has been increasing due to the initiatives taken at the government levels and services extended by various organisations. But it could hardly keep pace with the escalating growth of population. Inspite of the activities prevalent in India the illiteracy is existing as usual though various socio-economic factors are also involved.

As statistics will show, the adults form a major section of the illiterate mass. In order to promote the adult education (AE) activities the government has already spent/car-marked a sizeable amount of money (which has reached its maximum with a quantum jump in the VIth plan) in respect of the *total education.* Still then, 60% of the adult population remains illiterate and as many as 75% of the children in 6-14 age group do not complete elementary formal schooling. Continued increase in the formal education budget could not aid in the increase of literacy rate proportionately. Noticeable numbers of drop-outs from primary schools are an added problem. All these call for introducing an extreme non-formal & in-formal education system in an integrated way. As a welfare state, Indian government has to initiate 'adult education programme' (AEP) either directly or through various agencies to make the illiterates conscious of their rights ($\approx$ Human Rights). To turn the illiterates and neo-literates (i.e. drop-outs) to literates, a comprehensive 'National Adult Education Programme' (NAEP) was launched on 2nd October, 1978 to cover 10 crore people with an initial budget provision of Rs 200 crore.

1.1 ADULT EDUCATION

Highest priority in the AE activities needs to be extended to the illiterates.

And thus AE could primarily emphasize the imparting of literacy skills to the economically and socially deprived sections of the society. AE refers further to the planned educational activities designed especially for adult population. These may be either formal or informal/non-formal. AE activities will be as varied as individual interests and socio-economic needs, are presented in different forms, sponsored by a wide variety of and agencies institutions.

Basic objective is to help the adults with or without formal education, who wish to ramify their earlier educational shortcomings. It was rightly pointed out in Government of India's draft 5-yr plan (1978-83), that in any AEP, though literacy should have a special place of its own as one of the objective meant essentially for the poor illiterate peoples "its principal objective should be to increase the awareness of these people about themselves and about the social reality around them, to organize them, to assist them, to understand and strive to solve the different problems in their day-to-day life and to involve them in meaningful and challenging tasks of social and national development."[1]

2 LIBRARY ADULT EDUCATION PROGRAMME (LAEP)

There is an independent movement of AE in our country. No body will disagree that, any educational endeavour should have to base the backing of a good library. Here does the library, its role. And also among the common agencies of AE, libraries are perhaps the most flexible one in extending educational service to adult population. Adults being psychologically more mature, have the ability to receive ideas and information independently from books and other library materials or alternatively can undergo self-education.

Although various types of libraries work with adults, this function as well as the major thrust of service to out-of-school adults or drop-outs is imparted through the public library. The public library being one of the government financed social institutions can play a vital role, with certain inherent limitations, in AE covering mainly post-literacy & functional education phases to the neo-literates in non-formal ways. The public libraries, especially the rural ones should not merely be storehouses of books but also become community centres where educated, neo-literates, literates and other people can assemble and exchange their ideas. The librarians concerned are also expected to get themselves involved in active assistance. Now-a-days public library usually provides, through its standard services, self-education to the adults having reading capability with few other non-formal functional education to limited extent only.

The library adult services respond to the community needs and interests have been viewed as utilising four major functions:

(i) Information and bibliographic services;

(ii) Instructions and orientation in library resources and their use;
(iii) Guidance and advisory services; and
(iv) Stimulation of the public library's useres & non-users to intensified use of the library's resources and services.

2.1 Activities of Public Library

In the field of AE public library has three distinct roles : first as a supplimentary aid to the other agencies, then as an independent agency, and lastly as stimulating & motivating force taking a leadership role. Though many have expresed the opinion of a public library participating as a practical independent agency of the AEP, we think, in practice, it is quite impossible. It should keep its role limited to co-operate with other organisations in various ways. Librarian or library staff trained in this may participate as a teacher in any agency of AEP on part-time basis. He must be a member of the training committee of the same.

The activities of a public library towards the literacy movement in the country may be divided into three phases:

2.1.1 Preparatory Phase;
2.1.2 Operational Phase; and
2.1.3 Follow-up Phase.

2.1.1 *Preparatory Phase*

(*a*) *Community Survey*: Before planning the programme of imparting AE, the concerned adult community are to be surveyed in respect of the following points through interviews, questionnaires, and observations :

(i) their general needs and interests,
(ii) their societal, economical and political problems,
(iii) their occupational needs.

The adults are to be grouped according to their similar special demands based on the survey result. The coverage, depth and standard of the syllabus will be framed in accordance with the need and adaptability of the target user-groups. Data from the survey will help the AE agencies intending to launch new AEP in the particular region.

(*b*) *Initiating*: The publicity of the on-going activities of both the public library and adult education agencies should be extended to public through radio, tv, press, etc., and to attract the intending personalities. Publicizing the other agencies' endeavour to the public library users as an extension project through its instrumentation.

(c) *Acquiring* documents, materials, commercial sources which fit best to the expected adult need of the target region so far as their participation in the AE projects run by other agencies as well as their (only neo-literate) continued self-education, i.e. functional education.

2.1.2 *Operational Phase*

As active participant in the AEP the public library has got the following supplementary responsibilities to the government or non-government voluntary agencies of AEP

A Supplying : (i) Supplying selected books and printed materials;
(ii) Supplying selected non-print and A-V materials;
(iii) Supplying exhibition materials; and
(iv) Providing floor space.

B Planning: Acts as a participant in planning the AEP.

C Advising: Suggests subjects & methods, teacher's training, materials & resources in planning AEP.

D Training : (by apex body of public library system) : May include the activities in which the public library imparts training to individuals, groups or representatives of other AE agencies.

(i) Provides orientation and training in the presentation of book display, book reviews & talks;
(ii) Provides in-service training for public library staff in skills and techniques necessary to AE activities using books & non-print materials;
(iii) Provides training in using audio-visual materials.

E Informing : (i) Offers information about the locally organised AE opportunities by the AE agencies to the community;
(ii) Provides information about individuals in the community who are willing to work in AEP to the AE agencies;
(iii) Promotes and publicizes the public library's adult education services to the community;
(iv) Creating awareness in the AE agencies about the teaching aids (books, and other form of materials) which might be of help in their programme, available either with the public library itself, or within other libraries with the library system, which can be brought on inter library loan.

2.1.3 *Follow-up Phase through in-house Adult Services*

The post-literacy or follow-up activities constitute the self-education phase. The entire public library system has a key role to play in the post-literacy and follow-up activities.

Public libraries at their various levels, besides, maintaining books and literature for the neo-literates should be able to organise the following activities within their premises (with the help of the relevant non-print & audio visual materials) for promoting continuing AE activities.

A Group Discussions and Lectures : Topics relevant to functional development and social awareness of the local adults are to be selected It is to be supported by non-print media materials like charts, posters, pamphlets, films, film strips, slides, etc. Talks in simple language by eminent subject-experts may also be arranged.

B Radio Listening and Tele-Club Organising: Attention of the target users is to be drawn to the AE oriented radio and TV programmes (e.g. "Parashmani" from AIR, Calcutta). Radio & TV sets may be provided in the library meeting room. Programmes having potential future listening value to the special interest groups may be recorded on cassettes and efforts of providing arrangements for playing the same before an invited audience may be attempted. Librarian should initiate the local adult in organising the *Radio Listeners' Club* and *Tele-Club.*

C Exhibitions : Scientific information on agriculture & local industries may be highlighted through exhibitions.

D Study Circles : To keep the neo-literates abreast of the upto-date knowledge and to create enthusiasm among the adult readers, topical discussion among themselves about the books just studied or/and any topic may be initiated.

E Talks : Reading relevant sections and chapters of the books, journals and newspapers for the special interest groups.

In the light of modern ideologies, public library adult literacy efforts should now attempt the transferring of skills of interpreting driving (cars, tractors...) manuals; filling up income tax forms; bank loan forms; every day mathematical operations; using mass media; use of house hold/farm gadgets; getting access to community resources associated with survival, living comfort as well as for becoming a part of the social environment.

3 EVALUATION OF ADULT EDUCATION PROGRAMME

Evaluation of PL's adult services requires some exclusions. Evaluation of

partieular forms of LAEPs within the library or evaluation of total LAEP within a PL, etc. may be undertaken in phases.

To ensure effectiveness and systematic analysis of the in-house activities, the AE programme itself should have built-in mechanism for evaluation and automatic monitoring as well as applied research. Evaluation regarding the in-house activities should be a regular process so to avoid deficiencies and to remodel a more successful/effective need-based programme.

It is possible to make an approach to evaluate the public library's success in achieving the aims in three different levels.

(i) *Effectiveness* means how well the PL manages to satisfy it's users.

(ii) *Cost-effectiveness* attempts to determine whether the same service could be offered at any lower cost.

(iii) *Cost-benefit* : Cost of the LAEPs is justified by any measurable benefit. This is the toughest to workout.

The following methods may be adopted in general :

(*a*) *Interview* with the target users will reveal the satisfaction (both qualitative and quantitative) of their needs, and their opinion regarding the future extension of the on-going schemes.

(*b*) *Observation* by the librarian will measure the programme's successfulness.

(*c*) *Questionnaire* (pre-structured) on different aspects of AEP are to be circulated and the concerned adult users may be asked to return them after filling in the answers or answers may be obtained orally.

(*d*) *Attitude Survey* on the local neo-literates' increased library dependentness may be carried on. Their attitude towards the practical application of the functional knowledge extended by the LAEP.

(*e*) *Increase in library use* in the areas of new registration, total book use/circulation (subject break-up), growth in reading habits, increase in information seeking behaviour.

Thus in brief, achievements of PL may well be measured in terms of 'Library Inputs' (i.e., book added, reading list prepared, etc.) or more accurately 'Library Outputs' (i.e., attendance at lectures, demonstration, talk series, books circulated, etc.) rather than the 'Library Impact' on the problem or need.

The inferences coming from the evaluative observations will be an aid to decision making.

4 CONCLUSION

Librarian as an organiser of AEP should be nominated as a member of the

National Education Committee. Librarian should be given opportunity to express his ideas on radio, tv, or newspaper on different topics and the target audience should be encouraged to contact the nearest PL for further information.

In selecting materials for writing books specially for neo-literates, regional work-shops may be arranged with the authors.

Regarding book publishing, he may contact the publishers who, realizing the importance should produce the books at the least cost.

To co-ordinate with the University's Continuing Education Department the students would be provided necessarg library facilities.

All the library science schools should include the organisation and technical aspects of this sphere of extension services in their syllabus.

On the part of the government, the enactment of a library legislation in the country or in the state, may be one of the pre-requisites of AEP's success. The librarians too, encouraged by the ideals of the 'Barefoot Librarian' should rise to the occassion with missionary zeal.

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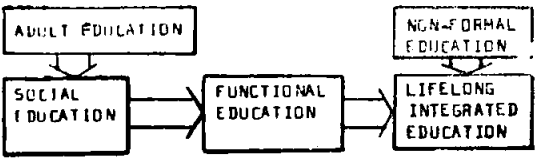


Fig. 1 : Currency of Terms in the Field of Adult Education (AE)

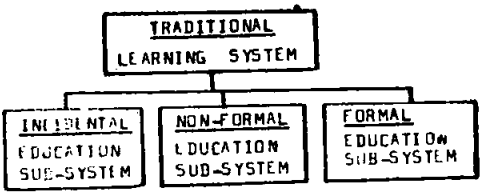


Fig. 2 : Human Learning System

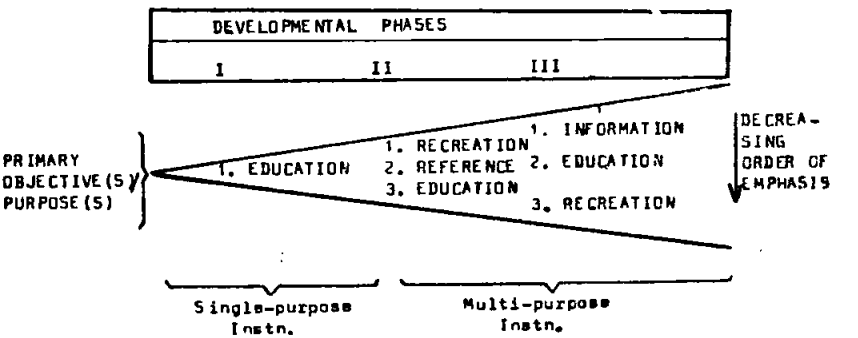


Fig. 3 : Widening Spectrum of Primary Objectives of Public Library (PL)

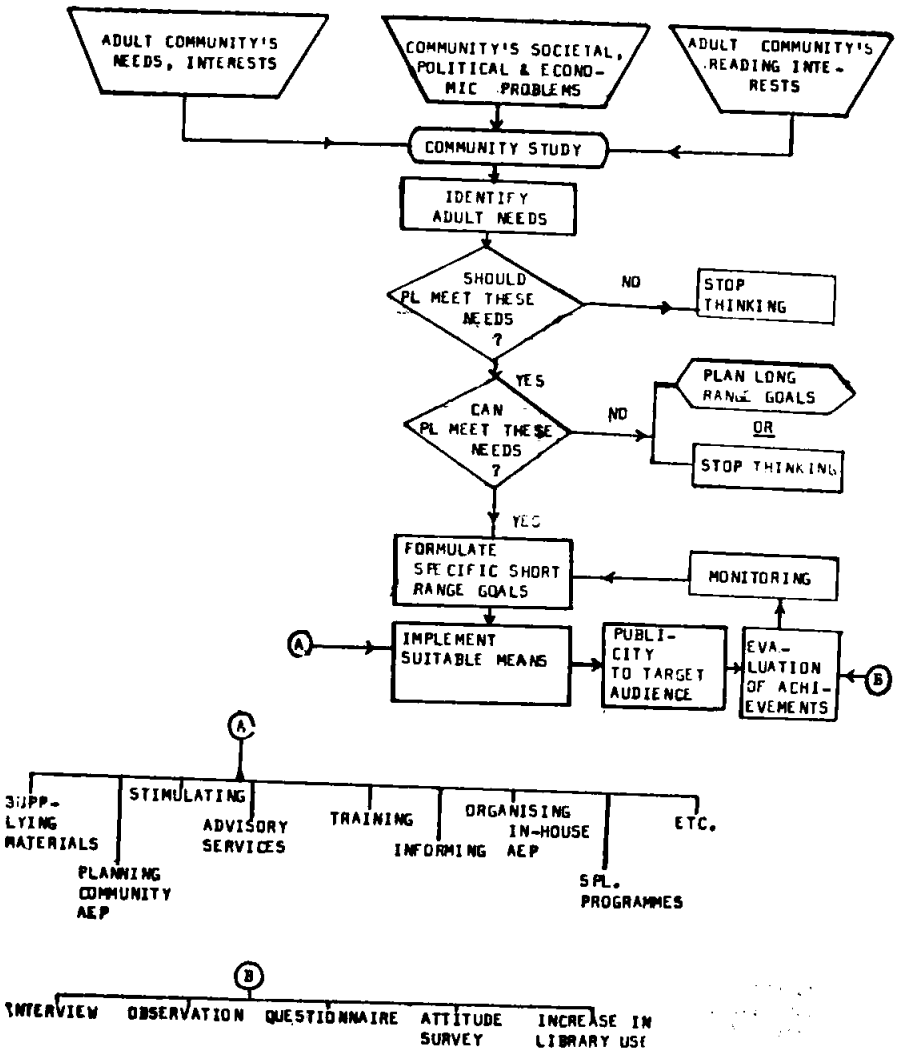


Fig. 4 : Planning Public Library (PL) Adult Education Programme (AEP)

Table 1 a : Progress of Literacy

	1951	*1961*	*1971*	*1977*	*1981*
% of literacy (age gr. above 14)	19.26	27.76	34.08	38.00	. . .
% of literates to total Indian population (including age gr. 0-4)	16.67	24.02	29.45		36.17
		29.28	33.20		40.88
Number of : Literates			156,440,275		237,991,932
Illiterates			372,145,203		419,933,693

Table 1 b : Expenditure on AE as % of Total Expenditure on Education

	I Plan	*II Plan*	*III Plan*	*IV Plan*	*V Plan*	*VI Plan*
Expenditure on Adult Education as % of total Education (in India)*	3.3	1.5	0.5	0.6	1.4	9.8

* Data has been taken from Adiseshiah, M S. : Economic and financial aspects of formal and non-formal education and NAEP. OUP, 1980. pp 138-222.

Table 2 : Peripheral Aspects of AEP

S No	*Characteristics of an Ideal AEP*	*Other Instructional Agencies for AEP*
1	*Relevant* to the environment and adult needs	1 School teachers
2	*Flexible* regarding duration, time, location . . .	2 Students
3	*Diversified* in regard to curriculum, teaching, learning and methods	3 Village Youths
4	*Systematic* in all aspects of organisation	4 Ex-servicemen and other retired personnel
		5 Govt. field workers
		6 Voluntary social workers
		7 Mass media (viz. the press, radio, tv, etc.)
		8 Formal educational centres (viz. Open Universities, continuing education centres, etc.)

PUBLIC LIBRARY DEVELOPMENT IN INDIA

M K JAIN

The origin, the nature and the purpose of public libraries depend upon the understanding of democracy. The principles underlying democracy are :

(i) Political equality of man;
(ii) Man's faculty for social, mental and moral improvement;
(iii) Respect for the rights of others; and
(iv) Tolerance for the opposite points of view.

The purpose of public library is to provide members of the society opportunities to overcome some of the social and intellectual barriers and that is why it is sometimes called "Poor man's university".

1 BACKGROUND

The first significant date in the development of libraries for the public in India is 1808 when the Bombay Government initiated a proposal to register libraries which were to be given copies of the books published from "funds for the encouragement of literature." Europeans living in Bombay, Calcutta and Madras founded the so called "Public Libraries" at these three presidency towns. As the main use of these libraries was confined to almost upper strata of society, these were not in the strict sense, public libraries. There were also subscription libraries (not free libraries) which can now be categorised as public libraries. In 1867, the government enacted Press Registration of Books Act (XXV) under which a printer of a book was to deliver free to the state governments concerned a copy of the book and one or two more copies, if the state government so desired. Additional copies were transmitted to the central governmsnt.

The second important phase in the history of library development began in 1900 when the reading room of the Calcutta library was thrown open to the

public. The Calcutta library was later named as Imperial Library. After independence the word 'Imperial' was substituted by the word 'National'. It is now called National Library. Important land-mark in the 2nd phase came when from 1906 to 1911 Sir Sayaji Rao Gaekward III of Baroda, with the help of a American librarian—Mr. A B William, built up an elaborate library system consisting of the central library, village libraries and travelling libraries in Baroda. Some of the libraries in Baroda had separate reading rooms for women. The library movement in Baroda became torch bearer for librarians in India and thus gave impetus to the library movement in the country.

2 POST-INDEPENDENCE ERA

Only after independence there has been fast library development in the country. Soon after independence Delhi Public Library was established in 1951, as a pilot project of the UNESCO in collaboration with the Ministry of Education, Governmment of India. There were two British Librarians-Frank Gardner and Edward Sydney under whose expert guidance Delhi Public Library was set up. The library was planned to provide complete library service as available in USA and UK. Based on that concept it started as an open access library. Besides usual sections and departments, a social services department providing lectures, discussion groups, film shows and other extension works, was established. A section for blind where sufficient braille books were available, was also set up.

The Advisory Committee appointed by the Government of India in 1955, in its report, submitted in 1958; recommended that library service should be free to every citizen of India and that the library pattern in the country should consist of a national library, state central libraries, district libraries, block libraries and panchayat libraries. Large number of states have now set up central libraries and quite a few of them have district libraries also. Besides National Library at Calcutta, Connemara Public Library, Madras, and the Central Library, Bombay, were declared as recipients of all books and magazines published in the country under the Delivery of Books (Public Libraries) Act, 1954.

The Planning Commission constituted a working group on libraries in 1964. This group brought out a survey of libraries in India. According to this survey per capita expenditure on public libraries per annum in India was Rs. 00.03 whereas in USA and UK it was Rs. 12.47 and Rs. 6.00 respectively.

3 PRESENT STATE OF DEVELOPMENT

Today India has a national public library system that serves a population of 684 million in an area of 3.3 million square kilometers. The urban population is 23.73% of the total and the rural 76.27% is spread over 2,643 towns and 5,75,000 villages, making a total of 5,77,643 habitations. The country is divided

into 22 states and 9 union territories for purposes of administration. These are further subdivided into 401 districts and 5,027 development blocks.

The national public library system envisages a national library, three regional libraries at Madras, Bombay and Delhi, a state central library in each state, a district central library in each district, and a block library in each development block. Each city with a population of 1,00,000 and above, will have its own city public library system. The district public library system will have branches and deposit stations in towns and villages.

Today, 15 states out of 22 have state central libraries; 291 out of 401 districts (73%) have district central librarles; 1,798 development blocks out of 5,027 blocks (36%) have block libraries; 41,828 villages out of 5,75,937 (7%) have village libraries and 1,280 towns out of 2,643 (48%) have town libraries. Of the 29 metropolitan cities that have a population of 4,00,000 and above, only four (14%)—Madras, Hyderabad, Bangalore and Delhi—have city public library system with central libraries, branches, and the deposit stations. Delhi has four bookmobiles, each with a carrying capacity of 3,000 volumes. It is estimated that only about 20% of the literate population of India has access to public library services.

It is pertinent to mention here that we have to go a long way in the development of public libraries in the country. A comparison of public lobrenes in India with UK and USA is given in the table on the next page.

4 LIBRARY LEGISLATION

Education, according to the Indian Constitution, is the state subject and, therefore, the provision of public library service is the responsibility of state and union territory governments. The central government could only extend financial support to them. The central government established the Raja Ram Mohan Roy Library Foundation in 1972, for providing grants to the libraries. At present a grant of Rs. 3 million rupees is given to district, block and village libraries, every year.

Tamil Nadu is said to be the most progressive in adopting library legislation as early as 1948. Similar legislations were adopted by Andhra Pradesh in 1960, Karnataka in 1965, Maharashtra in 1967 and West Bengal in 1979.

During 1978-79, India spent 120 million rupees or about 50 paise per literate person, on public library service. It is estimated that public libraries presently have 58 million volumes for a literate population of 253 million, or about one book for every four persons. They add about 3 million volumes to their collections annually, which means that one volume is being added for every nine literate persons. The national library in Calcutta has 2 million volumes and the two regional libraries in Madras and Bombay have about 3,00,000 volumes each. On an average, each state central library has 50,000 volumes, a district central lib-

Public library development : A comparison

Item	*India*	*UK*	*USA*
1 Population	684 million (1981)	55.93 million (1976)	226.5 million (1980)
2 Literacy	36.17% (1981)	99% (1977)	99% (1977)
3 Number of actual and potential library users	180 million	55 million	155 million
4 Total expenditure on education per annum	Rs. 11,000 million (1971-72)	Rs. 8,739 million (1970-71)	Rs. 3,83, 3700 million (1970)
5 Annual expenditure on public library development	Rs. 30 million	Rs. 6,000 million	Rs. 12,480 million
6 Provision of books from Public Library per 100 citizens	1	145	100
7 Number of citizens per 100 registered with Public Library as borrowers	.01	37	25
8 Number of books borrowed per year per every 100 persons from public libraries	1.6	512	263

rary 10,000 volumes, a block central library, 1,000 volumes; and a village library, 500 volumes.

Barring a few exceptions, public libraries in India have not received adequate attention from the state governments. Most of the libraries do not get adequate funds. West Bengal which comes next to Karnataka in terms of number of public libraries, the annual grant of the State Central Library for purchase of books is about Rs. 30,000.00. Similarly annual grants for city library and dis-

trict library for purchase of books are Rs. 3,000.00 and Rs. 1,800.00 respectively. The attention of the authorities is required to be drawn not only for the adequate provision of funds but also for the adequate provision of accommodation and staff.

5 STAFFING PATTERN

In a public library the staff may be divided into the following three categories:

(*a*) Professional;
(*b*) Semi-professional; and
(*c*) Non-professional.

The professional staff consists of those who are employed on professional jobs in the library and possess at least Bachelor's degree with atleast one year's professional training leading to a diploma or degree in library science. The semi-professional staff will consist of persons who perform library routine and techniques under the guidance of professional staff and have received elementary training in library science. The semi-professional staff should be atleast higher secondary with a certificate course in library science. The qualifications and experience of the non-professional staff should be according to the jobs they are supposed to perform in the library. It is very difficult to fix uniform strength of the staff in all the public libraries in the country. The number of persons in each category should be determined by the work load and the services that each library is offering.

It will be, however, essential that the scales of pay prescribed for the posts should be equivalent to the academic staff working in the educational institutions i.e. colleges and universities. In order to attract talent in the country with good academic background it is necessary that the scales of pay of the professional staff, in particular, should not be lower than the grades of the staff working in other sevices having comparable qualifications.

6 EDUCATION THROUGH PUBLIC LIBRARY

The public library is an institution for furtherence of popular education which is the culture of mind and spirit that books can infuse in life. Education implies the use of books for spiritual and intellectual as well as material and vocational benefit. Without good public libraries this purpose can not be attained. The technical/special libraries only help a person engaged in a particular branch of knowledge. They are not meant for everybody. The public library, however, big or small it may be, must supply in its material all the

manifestations of the requirements of community it serves. It is maintained to provide material that meets human wants, needs and tastes that develop capacities of mind and body.

In the field of education, libraries have to play an important role. In 1952 the Government of India initiated community development programme in which social education was assigned an important role. The libraries, therefore, became an integral part of this programme. As it is well known that libraries are institutions of "education byself' or "education without a teacher." Libraries are one of the agencies of social education and, as such stand in close relationship to other similar agencies. In 1961 when the author of this paper went to Canada, for his postgraduate training in library science, discovered that public libraries in North America were carrying out crash programmes of adult education. Adult education was defined as education of adults who were deprived of their education at the proper age for one reason or the other. The author in his article "Libraries and social education" published in the London Free Press, Canada, of August 21, 1961 suggested that the word "adult education" should be replaced with "social education" as was being used in India. Whether it is called "Social education" or 'Adult education' it is immaterial. The crux of the problem remains rhat a public library should organise various activities in which participation of the adult people who missed education at their proper age is readily available. If this objective is given proper attention and implemented with all sincerity a large number of illiterate persons in India can become literate.

PUBLIC LIBRARY IN A DEVELOPING SOCIETY

SUSILA GANESAN

The public library is a product of democracy and a practical demonstration of faith in the universal education as a life long process. They are primarily intended to serve the educational needs of adults, children and women.

1 A DEVELOPING SOCIETY AND ITS LIBRARY NEEDS

A society is formed by people who are members of community belonging to one or the other social group. The interest of knowledge of these different groups of people vary according to their individual nature. The very purpose of library is to educate the community in the widest sense. Since earlier days, the mode of communication has been in the form of books and journals and the problems were confined to collecting relevant materials and arranging them in some order. But the climate or environment in a developing society as we see today is different.

We are living on the threshold of a new age. We want to create a technological society, that too in quickest possible time. This is an age of information and technological explosion. They have become key to accelerated economic development. Abundant availability of technology and information has no use if these are not transferred and used for transforming primarily an agricultural society into a technological society. As said earlier, the main form of communication has been the printed word. The main hurdle in doing this is the presence of large illiteracy particularly at gross root level. Now a new class of citizens have emerged that is semi-literates. The task of libraries in transferring modern technology to rural areas and preventing the semi-literates from falling into illiteracy again is truly formidable.

2 PUBLIC LIBRARIES AND ADULT EDUCATION

The main goal of public libraries has been to provide equal opportunities

for access to information to everyone in the community, who wishes it, without any distinction of class, creed, age, sex and level of literacy and education.

The ability to read and write will enable the people to be fully equipped in solving their social and economic problems and make them a better citizen; for "a Nation that read is a Nation that leads". Library is the only institution which provides informal education in an informal atmosphere to the semi-literate and new literates.

The national adult education programme (NAEP) has been organising adult education programmes with literacy as an indispensable component since 1978. Approximately, over 65 million adults in the age group 15-35 have been covered. It is the primary duty of the public libraries to provide them with suitable reading materials, thus preventing them from falling into illiteracy again. It is also the effort to elevate them to full literacy. In an enlightened democracy, it is essential that the voting population should be educated and this age group forms formidable percentage of them.

3 POST INDEPENDENCE PUBLIC LIBRARY DEVELOPMENT

India has, perhaps second or third largest educational system in the world. Its total enrolment exceeds 80 million. Yet we do not have a uniform and well planned system of public libraries.

Provision of library services has been the responsibility of the state government under the Constitution of India. It is the southern states who pioneered legislation on public libraries. S R Ranganathan the father of public library movement in India gave a model library bill in the year 1933 and Tamil Nadu was the first State to provide a library system through legislation in the year 1948 followed by Andhra Pradesh in 1955 and Karnataka in 1965.

Tamil Nadu government also created the post of Director of Public Libraries to accelerate its movement. This was followed by the creation of District Library Officer for each district. Each district had a central library and a number of rural or taluk, town and village libraries. Madras city has a state central library and a district central library. On an average, each district has hundred rural libraries under the control of district library officer. Library cess at the rate of 5 paise for every whole rupee paid as property tax was levied. The state government gave a matching grant. Number of rural libraries were opened under various Plan schemes, for which central governmenl gave grants at a certain rate. All these were insufficient to run the libraries on sound lines. Major portion of the expenditure on these libraries were rent and salaries paid to their staff. Realising the need to accelerate the tempo of library movement, the government of Tamil Nadu, has recently provincialised the staff and embarked on an ambitious project of providing public libraries with their own building. Hundreds of such buildings are under construction through special government grants and public dona-

tions. Two major expenditure items having been met enough funds could be utilised for the purchase of books and modern equipments like reprographic machines, etc. Tamil Nadu government is keen to provide reading materials even to small villages, whose population is less than 5,000. They have introduced mobile libraries in many districts. They have also introduced novel schemes like door delivery system, books to policemen, to students, etc. Every district central library has women and children section. To inculcate reading habit among rural people, special book review meetings are arranged in rural libraries and prominent writers, citizens are invited. The readers are invited and entrusted the task of reviewing new publications, and authors of such publications are invited to reply to the 'reviews' in such meetings.

In brief, the stagnation in the library movement in Tamil Nadu has ended. It has gathered momentum and given the right lead will usher a new era in the library movement.

4 STAFFING PATTERN AND STRUCTURE IN PUBLIC LIBRARIES IN INDIA

Staffing pattern has been shown in the annexure 1. Each district has been given one Inspector of libraries who works under the District Library officer. Posts of grade I, II, III librarians have been sanctioned for rural libraries on the basis of number of books and their circulation. This system is expected to induce rural librarians to work with greater enthusiasm and zeal in enrolling members and issue of books. Each year, this is reviewed and libraries are either upgraded or downgraded. Promotional opportunities are linked with the progress of the libraries. Two institutes have also been functioning one at Madras and another at Madurai to train librarians. The following suggestions are made :

1 Adult education centres being located in rural areas, be housed in public libraries. Librarians may be entrusted with the task of teaching.
2 Library home extension activities, audio visual programmes, mobile service, etc. be used for adult education.
3 Adult education centres and library may be combined, so as to affect financial saving. This would help in solving the problem of finding staff for adult education programme.
4 A separate State Library Service could be created on the models of Indian Administrative Service. New entrants may be given training in library management.
5 Universities could treat "Public Library" as a separate subject and give due importance to them.
6 Methods should be evolved for greater mobility of library staff between

universities and public library service. This will help in bridging the gap between theory and practice.

7 Where finance is the only hurdle for the development of public libraries, Raffle scheme could be considered. Tamil Nadu government proposes to use this method for financing the "Mid-day meal scheme" for school children.

8 State governments may consider to supply their publications including acts passed by the legislature, free of cost to public libraries.

9 A net work of communication facilities should be established so that a villager should be able to get his required information within a day or two. Greater use of telephones, telex, etc should be encouraged.

10 Libraries should not only deal with printed media but also with video tapes, films, etc.

11 Librarians could be re-designated as information scientists and libraries as information centres.

12 Only qualified librarians should man the libraries.

13 At least at Taluk HQ library should have a qualified degree holder as a librarian.

14 Wherever possible museums in the district could be attached with the libraries.

15 Library acts wherever they exist, need modification, in keeping with the latest developments in the field of information science and communication.

ANNEXURE I

STAFFING PATTERN AND STRUCTURE IN PUBLIC LIBRARIES IN INDIA : PRESENT SET UP

DPL

DLOs ADPL

Lib—Central Library Branch Librarian (Rural Branches)

Suggestion

At State Level

DPL DLO Regional

Deputy Director DP

(for LLA's) (for other Libraries)

ADPL (Tech) ADPL (Accts) ADPL (Personnel) (at HQ Directorate)

DL Dt level *CLO*

DLO Lib DLO Lib

PUBLIC LIBRARY IN A DEVELOPING SOCIETY

M A NAYEEM

Before we venture on the library requirement, of a developing society/state it would be prudent to know in a few words the concept of a developing society itself. We consider a country as a developing country whose overall economy is on the path of economic revolution with the assistance of the developed nations, friendly countries, world organisations and last not but the least the entire contributions of varried nature from their own nationals.

1 LIBRARY REQUIREMENTS

Let us examine library requirements of a developing country like India. Here it would be worth-while to quote a popularly known proverb, 'necessity is the mother of invention'. We can not imagine about any invention or works without knowledge learning. A developing State requires constantly the latest knowledge and technical know-how in all the fields for an over-all development. The institution of library being the store house of knowledge caters the same to the State. In a developing state the library plays a vital role in feeding required knowledge in all fields because it is basically linked up with social welfare and is unquestionably inseparable from social development of the state.

The state is a political organisation. But the basic concept of the political organization, is the welfare of the community of society. As the society and the state are inter-woven, accordingly, therefore to some thinkers "Society is held together by the state, and if it were not thus held together it could not exist".

The state is a binding force in a developing society which primarily stands on the pillars of socialism and its various aspects like social justice and education. In the twentieth century welfare state, the successful working democracy is necessarily dependent of free education.

The success of democracy needs a crash educational progromme inclusive of

mass adult education which has to be taken up on national level. But to carry out this crash programme at a national scale, the public library will have to take recourse to the services of the soeiety on a wide scale and since the library is an educational concern of the state the government has to take up the responsibility of establishing and developing the public libraries both in urban and rural areas.

Public library and its services in a developing society be adopted under the directive principles of the Constitution. The object underlying the directive principles, contained in Article 45 of the Constitution, aims at doing away with illiteracy, so that the coming generation may have a better understanding of the social, economical and educational problems. The eradication of illiteracy would mobilise enlightened public opinion which is indispensible for the present day democracy.

Education being the prime responsibility of the state, it is the duty of the government to implement the public library development programmes which may assault on poverty and illiteracy and we may reach towards the path of developed country and attain the cherished goal of democratic socialism.

2 PUBLIC LIBRARY AND ADULT EDUCATION

Public library and national adult education programme (NAEP) are co-related. India is one of the largest democracies of the world having about 70 million population but the rate of literacy is 35% only and hence the need for adult educatlon has been felt. Therefore, the role of the public library in adult education programme is of great importance and this will provide an opportunity to illiterate adults to learn and know and create national awareness about day to day events of the country and thus infuse in them a sense of participation and total dedication in the national reconstruction programme. According to UNESCO, the public library is a "living force of popular education". "It is capable of extending its services and usefulness to all group of persons of the society without any discrimination of their age, sex, religion, economic condition and profession".

According to Smith a library provides adult education service of the following types :

1 Supply of books, films recordings and other reading materials;
2 Planning educational activities;
3 Advising the community on subjects, methods, and materials;
4 Training the readers and librarians in skills and techniques necessary for adult education activities;
5 By doing all possible activities, to further the adult education programme.

Dr. S R Ranganathan has rightly suggested the following functions for a Public Library in the changing and developing society of today. They are :

1 To read out books to illiterates and neoliterates at such stated hours each day as are agreed upon, or instead of reading books;
2 To give their substance by word of mouth, as this will get enriched and made realistic, by the personality of the person who gives the substance;
3 To produce wall pictures and charts representing the news and the latest facts and the idea in the form of tell tale pictures and charts;
4 To arrange for discussions among the literates and neoliterates at agreed hours on the basis of the information collected by them by the first three methods and even; and
5 To arrange for a drama by illiterates and neoliterates, at agreed hours.

India's Education Ministry has realised that after 35 years of independence the literacy rate of the country is still only 35 per cent. During the sixth five year plan, the Ministry of Education plans to cover 100% illiterate people in the 15-35 age group. This will cover more than 174 million men and women. But India spends merely Rs. 2,523.74 million on all types of education from adult literacy to universities annually. By this calculation, the total cost of covering 100 million persons would be about Rs. 1500 crores (Kothari estimate).

In 1978-79, according to UNESCO's survey, India had 50,000 adult education teachers 1,667 supervisors and 167 project officers. The figure has jumped in 1982-83 to more than 1 million teachers; 35,566 supervisers and 3,556 project officers and again in 1983-84, the target will be 1,16,667 teachers, 38,890 supervisers and 3,890 project officers. But according to the Director General of UNESCO the problem remains unchanged. Though it has been possible to reduce the illeteracy rate form 32.4 percent to 28.9 percent, but the absolute number of illiterates has increased from 742 million in 1970 to 814 million in 1980.

The Director-General warns that if the current trends do not change the total number of illiterates will reach 884 million in 1991-92.

In this context it would also be worth-while to quote from the Prime Minister—Mrs. Indira Gandhi's, inaugural address delivered at the Fifth World Book Fair held on the 4th February 1982, in New Delhi, "It is sad that in this land which produced some of the earliest books known to mankind, so many people are still denied access to books. Illiteracy and purchasing powers were the two reasons. In our development plans we had emphasised education and adult literacy. The literacy rate has more than doubled but so had population. To be effective, literacy must be accompanied by the publication and better books."

3 DEVELOPMENT OF PUBLIC LIBRARIES

The table below gives data about development of Public libraries in India.

Table 1 : Survey of the Public Libraries in India

S No	*Type of library*	*No of libraries*
1	State central libraries	15 (out of the 22 states)
2	Union territories	4 (out of the 9 union territories)
3	District central libraries	291 (out of the 402 districts)
4	Block libraries	1,798 (out of the 5,027 blocks).
5	Village libraries	41,828 (out of the 5,75,936 villages)
6	Town libraries	1,280 (out of the 2,643 towns)
7	Library legislation (All India level)	Not yet (Dr. S. R. Ranganathan recommended in 1930)
8	Library legislation (State level)	5 (out of the 22 states)
9	Library legislation (Union territory level)	Not yet

We have one public library for every three lakh people against the international figure of one public library for every twenty thousand people.

Table 2 : Position about Free Public Library Service in 1965

S No	*Item*	*USA*	*UK*	*India*
1	National per capita income	13,775.00	6,450.00	334.00
2	Per capita expenditure on education	804.00	176.00	8.70
3	Per capita expenditure on public libraries	12.47	6.00	0.03
4	Book stock per 100 persons	100	145	1
5	Registered borrowers per 100 persons	25	37	0.1
6	Books borrowed per 100 persons	422	824	1.6
7	Staff			
	7.1 Total	16,200	15,521	1,926
	7.2 Professional	5,125	3,089	449

Ratio of the above figure between USA and India and that of UK and India is as under :

S No	*Item*	*USA : India*	*UK : India*
1	National per capita income	41 : 1	19 : 1
2	Per capita expenditure on education	92 : 1	20 : 1
3	Per capita expenditure on public libraries	416 : 1	200 : 1
4	Books stock per 100 persons	100 : 1	145 : 1
5	Registered borrowers per 100 persons	250 : 1	370 : 1
6	Books borrowed per 100 persons	263 : 1	315 : 1
7	Staff		
	7.1 Total	8 : 1	8 : 1
	7.2 Professional	7 : 1	11 : 1

4 LIBRARY PERSONNEL

The role of the public library depends on the role of its professional staff. This is a fact that funds for library development in this country have always been exremely limited which reflect on the public library services. Due to non-availability of reasonable funds the library personnel are unable to provide for film shows, plays, exhibitions, lectures, radio talks, and T.V. programmes, etc. The success of a public library in a developing society depends also on funds and more library personnel with appropriate qualifications. The University Grants Commission has already recommended for proper finance and trained personnel, who have been described as teachers, to make libraries more effective. Similar views have also been expressed by the Hon'ble Madras High Court in 1982.

5 SURVEY OF PUBLIC LIBRARIES IN BIHAR

Bihar has got a huge collection of Sanskrit, Maithili, Arabic, Persian and Urdu manuscripts and books in different Khanquahs[1] and temples. Any Indian or foreign knowledge seeker interested in the educational and cultural achievements, continues to get inspiration and knowledge by using the rich libraries in

1 Khanquah :—Khanquah-e-Mujibia of Phulwari-sharif; The Imadia of Mangal-Talao; Khanquah-e-Rahmania of Munger; Kutub Khana Pir Damaria, (Syed Shah Fakhr Alam) Khalifabagh of Bhagalpur.

Bihar. Bihar has the privilege to have on its lands the reputed international libraries, the Khuda Baksh Oriental Public Library, Patna, Dr. Sachidanand Sinha Library, Patna, A. N. Sinha Institute Library and Gandhi Sangrahalaya Library, Patna. The other district central libraries like Bhagwan Pustakalya, Bhagalpur, the Shri Krishna Sevasadan, Monghyr, the Lakshmeshwar Public Library, Darbhanga need no introduction for the scholars. But Bihar still lacks behind in the net-work of public libraries in comparison to the small State like Kerala where there are about 4,000 public libraries with small population than that of the state of Bihar.

A comparative review between Bihar and Kerala shows that the libraries provision in the former state not only lack in their numerical strength but also in financial matter. Further the population and area of Kerala is also much less. For example the Raja Rammohan Roy Foundation runs libraries both in Kerala and Bihar. The government of Kerala seems to be generous in giving an aid of Rs. 2,25,000 to it as against Rs. 2,00,000 given to its Bihar branch by the government of Bihar (annual contribution from the States during 1981). Similarly the other public libraries of Bihar are inadequately financed which is a great hurdle in the growth and expansion.

The State of Bihar has a population of 69,823.154 (according to 1981 census), which is about 9.6% of the country's total population. But the number of libraries in the land of ancient Nalanda and Vikramshila Universities, is as far 26.01% of the sub-continental literacy whereas this land of Nalanda and Vikramshila has now a dense population with a vast area of 173.876 sq. km. which shows that the density of populatiou in Bihar per sqr. km. is 324. Is it not sad that there is only one library for every 22.5 villages and there is absolutely no town library for as many as 202 flourishing towns.

Table 3 : Statement Showing the Structure, Strength of Libraries and Library Legislation in Bihar.

S No.	*Type of library*	*No of libraries*
1	District central libraries	31 (out of 33 districts)
2	Sub-divisional libraries	25 (out of 76 sub-divisions)
3	Town libraries	Nil (out of 202 towns)
4	Block libraries	435 (out of 587 blocks)
5	Village libraries	4,422 (out of 77, 967 villages)
6	Children libraries	7 (out of 33 districts) (Attached with district libraries)
7	Mobile libraries	Nil
8	Library Legislation	Not yet (The same was recommended by the Government of Bihar in 1973).

6 CONCLUSION

India is a fast developing country. In the past thirty five years, our country has played a significant role in the field of Science and Technology, Energy, Space, Agriculture, Irrigation Industries and Education. During this period of planned economic development remarkable progress has been made towards the basic objectives, over-all economic growth, modernisation, self reliance and social justice alongwith the promotion of library services.

Raja Rammohan Roy Library Foundation was established by the Government of India, Department of Culture in 1972 to support library development schemes of the state governments. Now it has to be given a fair trial so that the people may derive practical benefits and thus be duly conversant with the current events of the world.

In view of the importance of the public libraries in a developing society in every day life and if the society has to exist as a living society, the government will have to consider the demand for the "library legislation" and Adult-Education Programme through the library services with adequate funds so that public library may became a "living force of popular education." Thus in the society, public library will create national awareness and may cure us of poverty and illiteracy, and other social problems like family welfare programme, prohibition, evils of dowry system, child marriage, crime against women and so on.

PUBLIC LIBRARY MOVEMENT IN MADHYA PRADESH : RETROSPECT AND PROSPECT

G D BHARGAVA

0 INTRODUCTION

The destiny of India lies in the next two decades depending upon the quality of educated, enlightened and patriotic citizens. The quality of life of the average individual can rise only when full use of the available opportunities is made and access to the information is within the easy reach of the people. The philosophy of providing information to one and all is an outcome of the various trends that came into existence during the 70's. The developing countries faced with various problems of development of the various sections in society are now seized of the requirement of providing formal and non-formal education to the people.

The society of the future has often been described as the 'learning society.' The economic and social problems pose for learning new skills and developing new attitudes towards work, life, leisure and recreation. This gives rise to continuous learning and adjustments to ever-changing demands. Technological developments continue to determine the changeover from manual work to intellectual work.

The value of information as an important and crucial factor in the social and economic development and progress of a nation is increasingly recognised in the present decade in comparison to ever before. There is a growing acceptance of the theory that the western societies are swiftly drifting towards a post-industrial society, which is basically an 'information society'. Whereas the means of production and land are the strategic resources in the industrial and pre-industrial society, the information is the strategic resource as a means of power in the post-industrial society. Thus, the pivotal role of information affords a splendid opportunity to the various types of libraries to expend their scope of activities and contribute substantially to national development.

In the context of the above developments, non-formal and informal education can play a vital role through the libraries. Library can become a centre where educated, neo-literates, literates and others, irrespective of caste, creed or colour can discuss and even think of solutions to the various problems. Libraries have a very basic role to play in the dissemination of information. They serve the people by providing the constant flow of information, so crucial to both national and inter-national developments. A well-stocked and properly managed library is an important and vital feature of informal and self-education.

1 LIBRARY SERVICE

The four great agencies which are available to make the citizen into a reasonable and thinking individual are the school, the library, the press and the radio. Of these four, the library is capable of extending its services and utility to all groups and shades of opinion in the community, irrespective of age, religion, profession, sex, political conviction and economic level. No other institution can perform such a wide range of services to the entire population of an era. In fact, the potentialities of a country's libraries, particularly of its free public libraries, from the point of view of educational and sociological significance to the people, are second only to the system of formal schooling.

It goes without saying that education of the individual is essential for the development of his mind. Though the importance of formal education, imparted in academic institutions, can not be understimated, yet it alone is insufficient for the development of one's personality. In addition to this, there is another kind of education, known as self-education. It is a life-long process and man has to continue his efforts to gain knowledge throughout his life-time. UNESCO has rightly exhorted, "The aim is the complete fulfilment of man in all the richness of his personality, the complexities of his forms of expression and his various commitments as indlvidual, member of a family and of a community. . . Only an overall life-long education can produce, the kind of complete man, the need for whom is increasing with the continually more stringent contraints. . . We should, no longer, assiduously acquire knowledge once and for all but learn how to build up a continually evolving body of knowledge all through life.

Feeding the intellectual hunger of each citizen and providing him the information relevant to his profession, health, happiness and prosperity are the subjects, which amount to the success and failure of democracy and the well-being of the nations. All democratic governments must provide all possible facilities to ensure a free and wide access to knowledge to their citizens. This can be secured by establishing and maintaining an up-to-date, efficient and fully organised library service. Nothing is more certain than the fact, that there is need everywhere for an enlightened and educated public opinion. The people cannot

be educated without an integrated library service throughout the country. In fact, to aspire for social and economic progress and political consciousness in modern age of democratic set-up without library service is like an attempt to run a car without the axle.

2 PUBLIC LIBRARY SERVICE

Public library is 'a living force' for popular education and dissemination of knowledge and culture throughout the country by unfolding varied faculties of each and every individual of the nation—whether man or woman, child or adult, rich or poor, normal or abnormal. Since a public library is an institution for the public, by the public and of the public, its services are exacting and challenging. Public library service has to cater for services of various kinds through the establishment of a network of public libraries throughout the length and breadth of a county, state or any other area.

According to Ranganathan, the public library service should :

(i) help the life-long self-education of one and all;
(ii) furnish uptodate facts and information on all subjects to one and all;
(iii) provide harmless and elevating use of leisure to one and all; and
(iv) acquire and arrange source materials for research.

UNESCO defines a public library service as 'one which is authorised by legislation, open to the public without charge and financed out of the public funds.' If this definition is applied to libraries in India, very few could be considered truly 'public'. Most of the 'publicl ibraries' in India are in fact subscription libraries', which require a patron to pay for the privilege of using the library. The government sometimes contributes a sum of money equal to that collected from the members, thus making the library 'public'. However, many libraries aided by the government have been established not for providing library service but as a part of social education programmes.

3 PUBLIC LIBRARY SYSTEM

A developing nation attempts to widen its horizons. This demands a greater knowledge of the universe. At this stage every individual has to learn new ideas and develop skills. The varying elites of the urban areas and the farmers of the rural areas get interested to know each other and the latest trends. While the city elites wish the rural life to be modernised, the rural community looks to the city people to fulfil their emerging needs and requirements.

In a developing society, the traditional norms and values diminish and the new ones emerge. All this poses a problem of their acceptance by the society

and the role of information becomes significant. The situation demands a better organisation and functioning or the information dissemination service to carry the message. In pursuance to this, there is a need for an integrated public library system from the level of rural libraries up to the national central library at the apex.

It has been established that universal, standard and adequate library service is secured only through a properly laid out and well-supported state-wide network of library system. An integrated library grid is a co-operative and organic structure in which every unit, even at the lowest level, is as rich as the whole system. The system allows for a balanced and even development of library service, over large areas. It permits introduction of library service, based on modern concept of service and approved standards. It makes libraries an extremely sensitive and vibrant instrument of dissemination of knowledge affording the people endless opportunities for constant, continuous cultivation of cherished human values.

4 LIBRARY LEGISLATION

A public library is an institution established for the use of the community without any distincion of caste, creed, colour, class or standard. To provide an efficient, organised, and maximum service to the community, there is a need for an integrated nation wide network of public libraries, with free book service to one and all.

In order to ensure the smooth working of a library system, legislative sanction is essential. This would delimit the respective functions, powers and duties of various library authorities at different levels for providing library service. It is through library legislation that proper and adequate library service is planned, organisation of library staff is insured and statutory provision of finance through levy of library cess is placed on legal footing.

Broadly speaking, ligislation lays down the structure, ensures its development on an approved pattern and prevents its haphazard growth. It sets up proper administration and management of libraries and ensures that the library authorities are so constituted that they are responsible for the implementation of the law. The legislation also provides for the financial support on a stable and a progressive basis.

To quote Dr Ranganathan, "To run a public library means money. If it is to be free, who is going to pay for the purchase of books, salary of the staff and various other expenses ? It is here that the need of 'Library legislation is felt". The Report of the Advisory Committee for Libraries, (1959) emphatically pointed out the necessity of library legislation as :

(i) it will bring homogeneous and unified library service to the state; and

(ii) it will ensure statutory recognition of state responsibility for the maintenance of public libraries in the state.

5 LIBRARY LEGISLATION IN INDIA

The need for library legislation in India was first conceived as far back as 1930. At the first All-Asia Educational Conference held at Benaras in 1930, a 'Model Library Act' of Dr S R Ranganathan was adopted by the Library Service Section of the conference. Consequent to this, various attempts were made in the then Bengal and Madras provinces during the period 1931-1947. However, nothing concrete could be achieved.

5.1 Sinha Committee Report, 1959

In 1957, the Government of India constituted an Advisory Committee for Libraries under the chairmanship of Shri K P Sinha. The committee, in its comprehensive report, recommended :

(i) enactment of a Central Library Act by the Government of India;
(ii) enactment of a State Library Act by each State;
(iii) Authority of local bodies to levy a library cess as a surcharge on property tax;
(iv) provision of library grants by the state governments equal to three-times the proceeds of the library cess; and
(v) provision of the grant equal to the library cess in a state by the government of India.

5.2 Model Public Libraries Bill, 1960-63

Consequent upon the recommendations made by the Advisory Committee for libraries, the Government of India, appointed in 1960 a committee for drafting a library bill under the chairmanship of Dr D M Sen. The committee submitted the Draft Bill, in 1963, to the Ministry of Education, which got it vetted by the Ministry of Law. This draft bill was then circulated to the various state governments and professional organisations for their comments. It was also discussed by Indian Library Association in its seminar held at Patna in 1964, and the views were communicated to the governments.

5.3 Model Public Libraries Bill, 1965

The Planning Commission, India, constituted a 'working Group on Libraries' in 1964 consisting of eighteen members to advise it on the development of

libraries in India during the Fourth Five-Year Plan. In its report, the group suggested a detailed libraries development scheme for establishing new libraries and maitaining and improving the existing libraries. It further provided for a Model Public Libraries Bill. All this, however, could not make much headway.

5.4 Public Libraries Acts

In spite of fifty years of continuous efforts to have a legislation-based public library system in the country, only five constituent states of India have succeeded in enacting Public Libraries Act as detailled below :

1 Madras (Tamilnadu) Public Libraries Act, 1948
2 Andhra Pradesh Public Libraries Act, 1960
3 Mysore (Karnatak) Public Libraries Act, 1965
4 Maharashtra Public Libraries Act, 1967
5 West Bengal Public Libraries Act, 1979

The remaining seventeen states are still without library legislation. Of these, the states of Uttar Pradesh, Madhya Pradesh, Punjab, Bihar and Orissa have been making vigorous efforts during the past two decades for the enactment of Public Libraries Act, with appreciable progress achieved by the states of Bihar and Madhya Pradesh.

6 LIBRARY LEGISLATION IN MADHYA PRADESH

Few regions in India are more interested in library legislation than Madhya Pradesh, literally meaning central region, situated in the heart of India. Intersected by meandering rivers and dotted with hills and lakes, this region has a rich variety of natural settings and fascinating beauty. Comprising what were formerly Madhyabharat, Bhopal and Vindhya Pradesh, together with a large portion of the state hitherto known as Madhya Pradesh, the present Madhya Pradesh State was formed on November 1, 1956. This region further exhibits interesting peculiarities in its picturesque costumes, spoken languages and customs.

Ever since Ashok was Governor at Ujjain, on behalf of his father, and even earlier, the region, now known as Madhya Pradesh, has been an important centre of Indian art and culture. It has a great tradition in literature and perennial learning and this tradition has continued unbroken, through the ages.

6.1 Physical Set Up

Madhya Pradesh is the biggest state of India, covering an area of 42,43,45 sq.

kilometres (with 14% of the total area of India). It is surrounded by seven States Uttar Pradesh in the north, Bihar in the north-east, Orissa in the east, Maharashtra and Andhra Pradesh in the south, Gujarat and Rajasthan in the west. It has a total population of 5, 21,38,467 (which is 7.6% of the total population of India) with 27.82% literacy. Madhya Pradesh has eleven revenue divisions and forty-five districts.

6.2 Library Setup

Curiously enough, this land of learning and cultural heritage has been inactive and dormant for the past few decades. The varied types of people, residing in hetrogenous places, do need that constructive reading material which can be made available to them through an integrated library system. However, no single department in Madhya Pradesh is made to shoulder the responsibility for public library service. Currently, three state departments—Education, Panchayat Raj and Information and Publicity—are providing library services in some form or the other, but without any co-ordination or integration. In addition to this, there are private public libraries in almost all the major cities of Madhya Pradesh. Academic institutions like universities, colleges (including medical and engineering), polytechnics and higher secondary schools have their respective libraries, getting annual grants from the government for their development and maintenance.

The breakup of the different categories of libraries functioning in the State of Madhya Pradesh are as under :

1	Regional libraries	5
2	District libraries	42
3	Information centres	6
4	Private public libraries	80
5	Gram Panchayat libraries	15,800

All these libraries are independent, isolated units, rendering the library service with their limited resources.

6.3 Efforts of S R Ranganathan

In 1948, S R Ranganathan submitted a Draft Public Libraries Bill to the then Education Minister of Madhyabharat, Shri Gokhle. He promised to introduce a Bill shortly on the basis of this draft bill. But very soon his portfolio was changed and no action could be taken.

In 1951, ninth All-India Library conference was held at Indore. At this conference, the matter of library act was discussed and necessary steps planned in

this connection. In 1952, Frank M Gardner was invited from England. In his 'Report of the Libraries of Madhyabharat', Gardner laid emphasis on the library act in the state. His views/suggestions were discussed at various conferences and seminars, yet nothing could be achieved.

6.4 Madhya Pradesh Library Association

In 1956, after the reorganisation and integration of the then existing Unions of Madhyabharat and Vindhyapradesh and Class 'C' state of Bhopal, a composite State of Madhya Pradesh was formed. In 1957, Dr S R Ranganathan was invited by Vikram University, Ujjain, as a visiting professor for the newly established teaching department of library science. During his visit, Dr Ranganathan formed the Madhya Pradesh Library Association (MPLA). In view of the successive failures in putting library movement on a firm basis in the state, Ranganathan persuaded Shri H V Pataskar, the then Governor of M P, to become the President of MPLA. Under his presidentship, the MPLA started active work. Necessary data were collected and assembled to work out a library development plan for M P. It was a difficult task as the state had just then been formed by amalgamating areas taken from different administrations. However, a draft Library Bill was prepared, approved by the MPLA and forwarded to the care of the government. No concrete action was taken on this draft bill. The secretarial process being unresponsive, the bill could not make its way through and it got pigeon-holed in the process.

In 1968, The Seventeenth All-India Library Conference was held under the auspices of the University of Indore. At this conference, the need for Library Act in the state was reiterated through the resolutions. MPLA was authorised to take concrete steps in this direction. Consequent to this, in 1970, the author of this paper and Shri V S Moghe, prepared a Draft Public Libraries Bill for M P and presented it to the then Education Minister, Shri Jagdish Narain Avasthi. The Bill was vetted by the Ministries of Education, Law and Finance at various levels. However, all these efforts were in vain and the library movement the state was moribund for the next few years. In the year 1974, the association mustered up strength and pursued the matter more doggedly with the Education Minister. He, however, parried the matter and deferred the Bill for sometime more.

6.5 Janata Regime

In 1977, Janata Party came in power and formed the government in M P, with Shri Omprakash Rawal as the Minister of State for Education. In this capacity, Shri Rawal attended the first conference of M P Public Libraries Association held at Burhanpur in December 1977. As suggested by him, a draft

M P Public Libraries Bill was presented to the government in 1978. Soon after, Shri Rawal was ousted of the Ministry.

6.6 Law Commission

The Draft Public Library Bill, presented to the government in 1978 was passed on to the Law Commission, constituted by the M P legislative assembly. The commission comprised of eleven members of the legislative assembly with former Justice P V Dixit as its chairman. One of its members, Shri Kanhaiyalal Dungarwal, showed keen interest and laid stress on the need for library legislation in the state.

The Law Commission finalised the draft of the Bill and submitted it to the Law Department. In its preamble, the chairman observed that, "Library is a powerful means and effective media for acquiring knowledge and proliferation of culture. Consequent to this, it is the duty of the welfare state that the development of libraries should be based on co-ordinated planning and adequate funds be made available for the establishment, organisation and development of public libraries. To achieve this, there is a need for Library Act in the State of Madhya Pradesh."

The recommendations of the Law Commission gave impetus to the library movement in the state. During the second conference of the Association held at Bhopal in January 1980, the then Governor of M P, Shri C M Punacha addressed the delegates. The then Education Minister made a declaration for the presentation of the Library Bill in the ensuing session of the legislative assembly. Unfortunately, shortly after this, the Government was out of power.

6.7 Congress Regime

The library movement was reactivated to life after the formation of the Congress government in the state. In January 1981, the third conference of the MPLA was held at Indore. Fortunately, the trio comprising of the then Education Minister, Law Minister and the Chief Minister graced the occassion and addressed the conference. All of them emphasised the need for the Act and assured to present the Bill in the coming Budget session of the Assembly. This assurance, however, got entangled in the bureaucratic cobweb for a long time and nearly a year passed without achieving anything substantial in the matter of library legislation.

In March 1982, at the fourth Conference of the Association, the State Law Minister, Shri Krishnapal Singh, attended the conference with a copy of the Draft Bill and declared, "As a Law Minister, I wish to inform the delegates that this Bill would certainly be presented in the next session of the Assembly".

This declaration pleased the library personnel and the well-wishers of the library legislation in the state. The Association, till to date, keeps its struggle on and has been reminding the Education Ministry for the early and effective enactment of the library legislation in Madhya Pradesh.

7 FEATURES OF DRAFT MP PUBLIC LIBRARIES BILL, 1978

The Draft Public Libraries Bill envisages a well-knit structure for the libraries in the state. It spells out details of an organisational set up conductive for efficient management and functioning of libraries in the State of M P. The Bill contains seven chapters and one appendix, detailing the existing pattern of libraries in the state. The main features of the Bill are as under.

7.1 Provision of Integrated Library Service

The existing library service organised by the Education Department and the Panchayat and Social Welfare Department does not have co-ordination at any level. Under the proposed Bill the libraries under both the departments will be organised under one department, thereby ensuring economy in expenditure. The Bill would ensure easier library service at the village level.

7.2 Organisation of the State Library Council

For the implementation of the Bill, the state gevernment would organise the State Library Council consisting of sixteen members as follows : (i) Education Minister; (ii) Education Secretary, (iii) three MLAs nominated by the Education Minister, (iv) Panchayat and Social Welfare Secretary, (v) Local Self Government Secretary, (vi) six members nominated by the State Govenment from amongst the persons with special knowledge or practical experience or interested in the organisation, development and administration of libraries and library services, (vii) President and one member, nominated by the Government, of the State Library Association, (viii) Director of Libraries.

The Education Minister is the chairman, and Director of Libraries is the Secretary of the State Library Council. The tenure of the Council is three years. The State Library Council is to be an autonomous body. The Director of Libraries will work under the direction and control of the Council.

7.3 Organisation of the Directorate of Libraries

For the direction and control of the library service in the state, the Directorate of Libraries is to be established. The Director would be a qualified library science trained person. The Directorate will consist of the Director and such officials as are appointed by the Government. The Director would

be responsible for the planning, organisation, administration and development of public libraries and public library system in the state.

7.4 Organisation of Library Managing Committee

The Bill specflies that it will be the duty of every city corporation, municipality, Janpad panchayat and gram panchayat to establish libraries and organise library service in their areas, as planned and apprroved by the Director of Libraries. For the successful execution of this, there is to be a Library Managing Committee at each level, consisting of four members. The expenditure of the libraries is to be met out of the two per cent of the local revenue collections and grants released by the State Government.

7.5 Organisation of Library Funds

The Bill provides for the organisation of Library Fund by the state government for the organisation and administration of library service in M P. The library fund will be composed of : (i) three per cent surcharge on the property tax as the library cess; (ii) State Government grant of not less than Rs. 50 lakhs per year; (iii) grants from the Central Government; (iv) donations and grants for the library fund; and (v) other sources. The library fund will be under the control of State Library Council.

7.6 Report and Inspection

The Bill provides for the inspection of public libraries by the Director or any official authorised by him. The Director will prepare the annual reoprt of the working and progress of the public libraries before April 30 and submit it to the state government with a copy to the State Library Council. The council will then prepare the final report on the working of the Directorate and submit it to the state government.

8 CONCLUSION

A brief review and a critical estimate of the various provisions made in the Public Libraries Bill brings home a number of points for consideration : (i) the proposed bill lacks ensuring integrated library service—state central library : regional central libraries ; and district libraries; (ii) the bill makes provision for the State Library Council as the autonomous body; whereas it should only be advisory body and the responsibility of organisation and administration of library service should be the responsibility of the state government; and (iii) the bill has not made any provision for the membership of library science expert in the library managing committes at various levels.

With all this, honest and concerted efforts by leaders of the library profession are being effectively made. With the active support of a few enlightened political leaders and well-wishers of library services, the shortcomings in the Bill are being rectified. Determined leadership, relaxed bureaucratic attitude and conducive political atmosphere offer promise for the future. A little amount of goodwill from the State Government can ensure library legislation in Madhya Pradesh as the sixth State in the country.

It may, however, be added that the ultimate strength of the nation depends upon the individual citizens. Let no one minimise the significance of the solid contribution of an individual to the common goal. If every individual, library professional and well-wisher of library decides to do his/her duty in the station of life where he / she is placed, something concrete can certainly be achieved. The sooner it is done the better.

I am reminded of the wise saying of the illustrious Rabindranath Tagore, 'who will take up my work', asked the setting sun. Hearing this question, the earth remained silent like a picture. There was an earthern lamp which said, 'Lord,I will do what little I Can."

Let every individual citizen of Madhya Pradesh, resolve to provide wholehearted cooperation in evolving the right kind of technique for the early passage of library Bill, and thereby fulfill the cherished dream of late Dr Ranganathan.

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PUBLIC LIBRARY SYSTEM IN HARYANA

JANAK RAJ
GIRISH CHANDRA

0 INTRODUCTION

It is a well known fact that Public Library is a living force for popular education and the place of the public library in the social life of a citizen for all round development cannot be over estimated in the modern times. The public library is a symbol and a product of modern democracy. It is a practical demonstration of democracy's faith in universal education as a life long process. "As a democratic institution operated by the people and for the people, the public library should be established and maintained under clear authority of law, supported wholly or mainly from public funds, open for free use on equal terms to all members of the community, regardless of occupation, creed, class or sex"[1].

The public library offers children, young persons, men and women opportunity and encouragement to educate themselves continuously, helps them to keep abreast of the development in all fields of knowledge, inculcates critical and constructive attitude towards issues of public importance, helps making them socially and politically better citizens of their country and of the world at large and develops their creative potentialities and powers of appreciation in arts and letters; aids in advancement of knowledge and the use of leisure time in a constructive manner.

Inspite of the important place that the Institution of public library occupies as an effective instrument in the socio-economic and spiritual development of both individual and the society, unfortunately in our country neither the people nor the persons in authority are conscious of this important aspect of the part that a public library may play. The idea that public library is a vital community force has to be instilled into the minds of our authorities.

This holds good for almost all the states in India barring a few where public library acts are in force. The state of Haryana in this field is in no way better than other states where public library acts have not been enacted.

1 DEVELOPMENT OF PUBLIC LIBRARIES

1.1 State of Haryana

The state of Haryana was carved out of the erstwhile East Panjab on 1st November, 1966. At that time only two district libraries, the one at Ambala Cantt. and the other at Narnaul, came to the lot of the state. Although the state made a tremendous progress in the field of rural electrification, metalled roads and agricultural produce in a short duration, yet the progress in the development of public libraries, both quantitatively and qualitatively, was least satisfactory.

1.2 Public Libraries

1.2.1 *District Libraries*

During 1966-1982 district libraries as under were established :

S No	*Name of the library*	*Year of establishment*
1	State Central Library (SCL) Ambala Cantt.	As a distt. library in 1957 and upgraded as CSL since 1967
2	District Library, Narnaul	1962
3	,, ,, Hissar	1967
4	,, ,, Gurgaon	1970
5	,, ,, Rohtak	1970
6	,, ,, Jind	1971
7	,, ,, Bhiwani	1976
8	,, ,, Sonepat	1980

According to a rough estimate, there are at present about 110 public libraries in Haryana besides the above 7 district libraries. A few of them are as under :

1.2.2 *Municipal Libraries*

1 Guru Gobind Singh, Municipal Library, Ambala City
2 Gandhi Municipal Library, Karnal
3 Lajpat Municipal Library, Hissar
4 Lajpat Municipal Library, Jind
5 Municipal Library, Safidon

6 Municipal Library, Narwana
7 Municipal Library, Rohtak
8 Gandhi Municipal Library, Panipat
9 Municipal Library, Sonepat

1.2.3 *Other Libraries*

1 Gandhi Smarak Nidhi Library, Ambala Cantt.
2 Partap Public Library, Karnal
3 Kirori Mal Library, Bhiwani,
4 Jain Public Library, Hissar
5 Chaterji Public Library, Hissar
6 Aggarwal Public Library, Rewari

2 USER POPULATION

The total population of India according to 1981 census was 683,810,051, and the population of Haryana was 12,850,902. It forms 1.88% of the total population of the country and ranks 15th in descending order of population statistics among the other states of India.[3]

Table 1 : Population Analysis by Area for the year 1981

		Type	*Number*	*Percentage*
Total Population	4,12,851 lakh	Rural	100.29 lakh	78.04
		Urban	28.22 ,,	21.96

In terms of rate of literacy the State of Haryana in 1981 had the 19th position whereas it was 20th in 1971 among Indian states. The table 2 on next page indicates that though the percentage of literacy has improved over a period of 10 years yet the number of illiterates has increased from 73,37,629 in 1971 to 82,45,253 in 1981.

The library needs of the students who have joined schools are supposed to be looked after by the school libraries. The library needs of the dropouts, both at primary standard stage and middle standard stage, are to be looked after by the public libraries. The dropouts especially at the primary standard stage are bound to relapse into illiteracy in case they are not exposed to reading or writing situations for some years after they dropout. Public library system is the only answer to save this situation. A look on the student population and the enrolment of both the age groups of primary level and middle educa-

tion, would make it clear as to what a sizeable chunck of population of drop-outs year after year is inflating the number of illiterates and neo-literates and the money spent to make them literate is gradually going down the drain.

Whereas the table 3 on the next page shows a healthy trend that the number of unenrolled children is decreasing every year, the table 4 (at p 115) indicates that the umber of dropouts after primary stage is increasing.

Table 2 : Comparative Study of Literate Population for the years 1971 and 1981

Item	*Total*	*Male*	*Female*
1981 Year[5]			
Population	12,850,902	68,46,153	60,04,749
Literate and Educated	46,05,649	32,71,047	13,34,602
Illiterates	82,45,253	35,75,106	46,70,147
Percentage of Literates to the total population	35.84%	47.78%	22 23%
1971 Year[6]			
Population	1,00,36,808	53,77,258	46,59,550
Literates and Educated	26,99,179	20,25,424*	6,93,755
Illiterates	73,37,629	33,71,834	39,65,795
Percentage of Literate to the Total population	26.89%	37.29%	14.88%

Source : Haryana Economic and Statistical Organisation, Planning Department. Statistical Abrastract of Haryana, 1980-81. Chandigarh, the auth. 1982. p. 29.

**Ibid* p. 46.

3 CONDITION OF LIBRARIES

After having a view of the number of libraries and the type and quantum of population in the state, they have to serve, let us have a glimpse of the condition of the libraries in the state. Unfortunately the data about the libraries run by municipal bodies and other voluntary philanthropist organisations, stated earlier in para 1.1, are not available, so nothing more can be said about them.

3.1 State and District Libraries

The state at the moment has 12 districts, but only 7 districts have their district libraries. These libraries also mostly function as city libraries because their clientele is limited to the population of the town where a district library is located. No

Table 3 : Unenrolled Children

Items / *Age Group*		*1979-80*			*1980-81*			*1981-82*		
		Boys	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*
6-11 Yrs. (I-V) Standard	Population	8,42,700	7,75,800	16,18,500	8,30,300	7,73,100	16,03,400	8,52,458	7,80,100	16,15,400
	Enrolled	7,22,745	3,88,836	11,61,581	8,22,640	4,22,847	12,47,487	8,35,300	4,47,816	13,00,274
	Not enrolled	1,19,955	3,86,964	4,56,919	7,660	3,50,250	3,55,913	17,158	3,32,284	3,15,126
11-14 Yrs. (VI-VIII) Standard	Population	5,28,600	4,66,400	9,95,000	5,39,400	4,77,900	10,17,300	5,27,000	4,72,200	9,99,200
	Enrolled	3,30,937	1,14,309	4,45,246	3,51,514	1,25,728	4,77,292	3,72,620	1,32,502	5,05,122
	Not enrolled	1,97,663	3,52,091	5,49,754	1,87,886	3,52,172	54,30,008	1,54,380	3,39,698	4,94,078

Source : DPI Schools Haryana, Chandigarh.

Table 4 : Dropouts

Items		*1979-80*			*1980-81*			*1981-82*		
Age Group	*Enrolment*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*	*Boys*	*Girls*	*Total*
6-11 Yrs. (I-V) Standard	Enrolment	7,27,745	3,88,836	11,61,581	8,22,640	4,22,847	12,45,487	8,35,300	4,47,816	13,00,274
11-14 Yrs. (VI-VIII) Standard	—do—	3,30,937	1,14,309	4,45,246	3,51,514	1,25,728	4,77,292	3,72,620	1,32,502	5,05,122
	Dropouts after Primary stage	4,41,808	2,74,527	7,16,335	4,71,126	2,97,069	7,68,195	4,63,080	3,15,314	7,95,152

Source : DPI Schools, Haryana, Chandigarh.

Table 5 : State Central Library and District Libraries

S No	Name of the Library	Year of Establishment	Stock*	Average annual increase in stock	Membership*	Staff		Issues£
						Trained	Others	
1	State Central Library Ambala Cantt.	1957 as Distt. Library upgraded as SCL from 1967	40,423	1,608	2,506	2	7	44,000
2	Distt. Library Narnaul	1962	28,700	1,510	1,805	2	5	12,551
3	Hissar	1967	20,758	1,475	1,525	2	5	6,746
4	Gurgaon	1970	27,000	2,454	1,594	2	5	4,906
5	Rohtak	1970	—	—	1,796	2	5	12,798
6	Jind	1971	18,631	1,863	1,728	2	5	6,751
7	Bhiwani	1976	19,620	3,924	1,439	2	5	11,992
8	Sonepat	1980	3,084	3,084	302	2	5	4,819

* As on 31st March 1982.
£ As issued from January 1981 to August 1981.
Source : DPI Higher Education, Haryana (Figures collected in person).

district library is having block, city and village libraries under its control. The state central library also does not cater to the library needs of the local city residents and surrounding suburban areas through a mobile van. The four district towns have also yet to have their district libraries. At the same time the entire rural population, which is 78.04% (table 1) of the total population of the state, is altogether left unattended thus far.

3.2 Stocks

The annual average increase of stock is so low that the stock cannot cater to the library needs of a good number of readers with varied interests in view of the annual increase in the printing of good titles and the general increase in population and literacy.

The State Central Library has only two professionally trained members of staff, one senior Librarian and one Junior Librarian, the others are steno-typist, Restorer, attendants. Mali, Peon-cum-chowkidar, Sweeper, etc. All the district libraries also have two professionals. This shows that the number of staff has not been linked with the increase in stock, membership and services. What type of library services can be expected of a state library which has only two professionals since 1967. Under these circumstances how can it be expected from the state or district librarian that he would make efforts to increase clientele and services when he knows that staff is not going to be increased by the authorities in proportion to the work that he may increase through his efforts by way of publicity.

3.3 Circulation

Whereas the issue figures have its implications on the number of staff handling the issue and return of the documents, it also speaks of many more things, say, the interest shown by public served in the stock, whether the stock is representative of the various tastes of the population or not, adequacy of the publicity media used by the library and the calibre and enthusiasm of the library staff, etc. The issue of some of the libraries is very low as is clear from table 5 (on page 116).

3.4 Budget

Budget for the public libraries (State and District) in the state is met out of a minor budget head. "Public libraries" which forms a part of the major budget head : "278-Art and Culture". The other minor heads of the major budget head are as given at page 120.

Table 6 : Distribution of Staff in Different Type of Libraries

S No	Name of the Library	Senior Librarian Rs. 550-900	Junior Librarian Rs. 420-700	Steno-typist Rs. 400-660 +25 Spl. pay	Restorer Rs. 400-660	Book Binder Rs. 350-550	Class IV Rs. 300-400	Peon-cum-Chowkidar Rs. 300-400
1	State Central Library	1	1	—	1	1	2	1
2	District Library, Hissar	1	1	—	1	—	2	1
3	District Library, Bhiwani	1	1	1	1	—	2	1
4	District Library, Jind	1	1	—	1	—	2	1
5	District Library, Rohtak	1	1	—	1	1	2	1
6	District Library, Gurgaon	1	1	—	1	—	2	1
7	District Library, Sonepat	1	1	1	1	—	2	—
	TOTAL	7	7	2	7	2	14	6

Source : Director of Higher Education, Haryana, Chandigarh.

Table 7 : Budget Provision for 1982-83

S No	Name of Library	D.A.	Travel Expenses	Office Expenses	Rent, Rate & Taxes	Material & Supplies		Unforseen charges	Periodicals	Binding material	Total	Salaries
						Library Grant	Furniture					
		Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs
1	State Central Library, Ambala Cantt		700	2,000	10	10,500	500	1,000	1,400	500	13,900	
2	Distt. Library Hissar		500	2,000	—	9,000	500	1,000	1,400	450	12,350	
3	Distt. Library Bhiwani	21,450	500	2,390	—	9,000	500	500	1,400	450	11,850	2,15,000
4	Distt. Library Jind		500	2,000	3,600	9,000	500	500	1,400	450	11,850	
5	Distt. Library Rohtak		500	2,000	—	9,000	500	500	1,400	450	11,850	
6	Distt. Library Gurgaon		500	2,000	—	9,000	500	500	1,300	450	11,750	
7	Distt. Library Sonepat	7,400	1,000	4,000	7,200	20,000	2,000	1,000	2,000	1,000	45,600	38,700
	Total	28,850	3,300	16,000	10,810	75,500	5,000	5,000	10,300	3,750	1,19,100	2,53,760

Source : Director, Higher Education, Haryana. Chandigrah.

C Promotion of Arts and Culture
D Archaeology
E Museums
G. Archaeological Survey[7]

After having a glance over the table 7 it is obvious that the budget provisions are too meagre in view of the increased cost of reading meterials and other materials in addition to the increased population which is to be served. Book grant of Rs. 10,500 for the SCL is too low. Rather one hardly sees any substantial difference in the budget provisions of the SCL and of the other district libraries.

Let us compare the budget provisions of these public libraries for the last three years.[8]

1980-81	Rs. 5,50,421.00
1981-82	Rs. 5,50,640.00
1982-83	Rs. 4,83,680.00 (Non Plan)
	Rs. 1,70,000.00 (Plan)
	Rs. 30,000.00 Grant to local bodies 6,83,680.00

Leaving aside the Plan budget provisions and grant to the local bodies for the year 1982-83, we find that the budget is not a progressive one. It is in no way linked with the increase in general population and the population of literates.

The total budget of the state on education for the year 1982-83 is Rs. 85,18,93,720.00[9]. The budget provision for the public libraries in the state during the year 1982-83 is Rs. 6,83,680 which comes to 0.08% of the total budget provision for education in the state. "In the method of proportion, it is assumed that, in conformity with what prevails in other lands, the library budget should be 6¼% of the educational budget or 1 percent of the total budget[10]"

3.5 Authority

The state central library (SCL) and the district libraries are under the administrative control of the Director, Higher Education, Haryana whereas the budget of these libraries does not form part of the budget of the department of education as is clear from para 3.5 above. The municipal libraries are under the administrative control of the department of local-self government and in turn under the respective municipal bodies. Grant-in-aid is provided to the local bodies for libraries out of the minorbudget head "*F*—Public Libraries" as stated in para 3.5.

4 ADEQUACY OF LIBRARY SERVICES

In order to measure the adequacy of library services provided by the public libraries (SCL and district libraries) the population of three levels has been taken on one hand i.e., the population of each district as a whole, of the district town and of the literates/educated districtwise. On the other hand, the factors taken to be measured against these three levels of population are the budget, book-stock and registered membership.

4.1 Expenditure

As per table 8 given at the next page the lowest per capita expenditure i.e., Re. 008 is for district, of Rohtak and Hissar, their population being quite high. The highest per capita expenditure is Re. 1.00 for Sonepat. It is so because its population is low as it is having the fifth position in terms of population to other districts, having district libraries. Besides this, the budget also includes capital grant for district Sonepat as the district library had been established only in the year 1980. District town Rohtak has the lowest per capita expenditure of i.e. Re. .07 and the district town of Sonepat has the highest i.e. Re. 1.346. The factors governing this position are the same as for the whole district of Rohtak and Sonepat.

4.2 Stock

The table 8 indicates that leaving district Sonepat the lowest per capita sharing of book is .01 in district Jind and the highest is .03 in district Narnaul. Among the district towns the lowest per capita sharing of books is .038 of Ambala Cantt. and the highest of Narnaul is .57. The reason again for this position is the high and low population respectively.

4.3 Membership

The table 8 makes it evident that the lowest percentage of registered members to the total population is .102 in district Hissar and the highest is .19 in district Narnual. The reason for higher registration of membership in district Narnual is lower population in comparison to district Hissar. The lowest and the highest percentages are .11 and 3.61 for district towns of Hissar and Narnaul respectively.

4.4 Literate Population

Since the number of literates/educated in each district is much less in relation to the total population of the respective district, the per capita expenditure,

Table 8 : Population of Districts & District Town Vs their Budget, Stock & Membership

S No	District	Population				Budget			Stock			Total members	Membership Percentage to total Population of	
		1971		1981		Total	Per Capita		Total	Per Capita				
		Distt£	Town*	Distt	Town@	Budget$ Rs	Distt Rs	Town Rs	Documents	Distt	Town		Distt	Town
1	Rohtak	10,72,821	1,24,755	13,26,343	1,66,631	11,850	0.008	0.070	—	—	—	1,796	0.13	1.07
2	Ambala Cantt	10,98,405	1,02,493	14,00,133	1,04,502	13,900	0.009	0.133	40,423	0.028	0.038	2,506	0.17	2.39
3	Karnal	—	—	—	—	—	—	—	—	—	—	—	—	—
4	Hissar	11,60,835	89,437	14,91,490	1,37,254	12,350	0.008	0.138	20,758	0.013	0.15	1,525	0.102	0.11
5	Bhiwani	7,26,233	73,086	9,16,744	1,01,263	11,850	0.012	0.162	19,020	0.02	0.18	1,439	0.156	1.42
6	Sonepat	6,86,986	62,393	8,43,968	1,09,337	84,000	1.00	1.346	3,084	0.003	0.028	302	0.035	0.276
7	Gurgaon	6,67,587	57,151	8,40,817	1,01,071	11,750	0.013	0.205	27,000	0.03	0.26	1,594	0.189	1.57
8	Jind	7,59,670	38,161	9,35,292	58,367	11,850	0.012	0.310	18,631	0.01	0.31	1,728	0.184	2.96
9	Mahendragarh (Narnaul)	7,61,605	31,875	9,49,745	50,000	—	—	—	28,700	0.03	0.57	1,805	0.19	3.61

£ Statistical Abstract, Haryana. 1980-81, p. 29.
* Statistical Abstract, Haryana. 1975-76, p. 22.
@ Statistical Abstract, Haryana. 1980-81, p. 34.
$ Office of the Director, Higher Education, Haryana.

sharing of stock and percentage of membership of the literates to the total population are obviously higher in comparison to the position shown in table 8 where population of each district town as a whole (literates and illiterates combined) has been considered.

4.4.1 *Expenditure*

As per table 9 given at the next page the lowest per capita expenditure is Re. 0.02 in the districts of Rohtak, Ambala and Sonepat. The per capita expenditure in district Jind is the highest which is Re. 0.05. The reason for this is that the population of this district is minimum as compared to all the other districts.

4.4.2 *Stock*

The lowest per capita sharing of books is .008 in district Sonepat which can be ignored as the library was started only in the year 1980. Leaving Sonepat, the other per capita sharing of books is .046 in district Hissar. The highest per capita sharing of books is .09 in district Gurgaon. Again the reason here is low population as compared to other districts.

4.4.3 *Membership*

Leaving district Sonepat, the lowest percentage of registered members to the total population is attested as .322 in district Rohtak and the highest is .71 in district Jind whose total population is minimum in comparison to other districts.

4.5 Having discussed thus far about the adequacy of public library service, provided in the state at the moment, there is hardly any scope left to disbelieve a conclusion that on the whole the public library service is too poor by any modest standards.

5 LIBRARY LEGISLATION

5.1 NEED

Among the most prominent reasons for the poor library services in the state are the control of more than one library authorities and inadequate sources of funds. For free library service to one and all, sufficient finances, maintenance of proper standards of service to the clientete, economy, and efficiency it is a must that all public libraries federate into a system and are brought under one common management. This is possible only through legislation.

"The aim of legislation is to create the necessary library agencies and to define their functions in such a way that the library service may work along the

Table 9 : Districtwise Population of Literates and Educated

Name of the district	*1981**	*1981*	*Budget*		*Library Stock*		*Membership*	
	Literates and Educated	*Percentage to the total population*	*Budget* Rs	*Per Capita Expenditure*	*Total No. of Documents*	*Per Capita*	*Total Members*	*Percentage to the total population*
R	5,57,519	42.03	11,850	0.02	—	—	1,796	0.322
A	6,18,971	44.21	13,900	0.02	40,423	0.065	2,506	0.404
K	4,79,973	36.42	—	—	—	—	—	—
H	4,43,361	29.73	12,350	0.03	20,758	0.046	1,525	0.34
B	3,01,072	32.84	11,850	0.04	19,020	0.063	1,439	0.47
S	3,43,001	40.64	84,300	0.02	3,084	0.008	302	0.08
G	2,91,455	34.66	11,750	0.04	27,000	0.09	1,594	0.54
J	2,43,123	25.99	11,850	0.05	18,631	0.076	1,728	0.71
N (Mohindergarh)	3,61,318	38.04	—	—	28,700	0.079	1,805	0.499

* Statistical Abstract of Haryana, 1980-81, p. 46. R = Rohtak; A = Ambala; K = Kurukshetra; H = Hissar; B = Bhiwani; S = Sonepat; G = Gurgaon; J = Jind; N = Narnaul

most effective and economical lines. Library legislation guarantees establishment, development and maintenance of libraries. It provides for necessary financial support on a suitable and progressive basis. It ensures development of libraries on an approved and uniform pattern. It sets up proper management for the running of libraries. The library authorities are so consistuted that they are responsible to the public".[11]

5.2 Historical Perspective

5.2.1 *India*

The first public library system in India in the modern sence of the term was initiated by H. H. Sayaji Rao Gaekwad III of Baroda. "In 1910 he inaugurated for his state a scheme of integrated public library service with the help of an American Librarian W. A. Bodon, a pupil of Melvil Dewey. The system composed of a State Central Library many branch libraries and travelling libraries with special provision for women and children and audio-visual section for the illiterates and the semi-illiterates".[12]

The history of library legislation in India was started with the efforts of Dr. S R Ranganathan, who was then one of the secretaries of the Madras Library Association (MALA) and "was invited to become the Secretary of the Library Service Section of the First All Asia Conference held at Benaras on 26-30 December, 1930. He then presented to the Conference a draft Model Library Act for India and this was included in the papers offered to the Conference... This was printed in 1931 as annexure VII of the third annual report of the MALA and was widely circulated.[13] "In 1931 the MALA took upon itself the task of preparing a comprehensive Madras State Library Act. The association after its prolonged and persistent efforts succeeded in its object and Madras made history by adoption of a Public Library Act in 1948.

Realizing the importance of free library service to its citizens the Government of India appointed in 1957 an Advisory Committee for Libraries. The committee in its report (1959) recommended enactment of library legislation. In pursuance of this recommendation the Central Ministry of Education drafted a Model Public Libraries Bill (1962) and circulated the same to all the states so that Library Acts may find place on the Statute books of all the states of India. The Madras Public Libraries Act was followed by other public library acts in the states of Andhra Pradesh, Maharashtra and Karnataka, and West Bengal.

5.2.2. *Haryana*

After the State of Haryana came into existence on November 1, 1966, the Haryana Library Association took its birth in the early 1967. In 1967 the dis-

trict library at Ambala Cantt. was upgraded as State Central Library. Late Shri M. L. Bhagi, the then State Librarian drafted[14] a Public Library Bill on the lines of the Model Public Libraries Bill (1962) circulated by the Government of India and also consulted the Library Acts of other states. The draft bill was discussed in a meeting of the Haryana Library Association and submitted to the Government of Haryana.

The Bill presently is with the office of the Director, Higher Education, Haryana. Opinions of various experts on the draft bill have been obtained by the office and the central library committee in the same office has deliberated on the draft from time to time. In pursuance of the same in 1979 the Secretary of Haryana Library Association had a personal meeting with Shri O.P. Bhardwaj, I.A.S., the then D.P.I., who showed keen interest in furthering the cause of public library system through legislation. The draft bill is still hanging fire. Haryana Library Association Organised its Sixth Seminar on Public library system in Haryana" on June 20, 1982 at Kurukshetra. The seminar besides other recommendations (Appendix I) recommended to organise a seminar on "Library Legislation in Haryana" in the near future and also set up a standing sub-committee consisting of 5 members which may follow up the legislation with the appropriate authorities. Let us hope that the effort of this subcommittee will bear some fruit.

6 CONCLUSION

It cannot be concluded better than in the words of Advisory Committee for Libraries (1959) which says, "with such universal acceptance of the important role of libraries in national reconstruction, it would appear strange that their establishment, and maintenance should have failed to receive the priority due to them.[15]" The State of Haryana is more sound financially than many of the states in India. If all the various financial resources, as suggested in the Mysore Public Libraries Act, 1965, are incorporated in the Act by the Government of Haryana, it will not be difficult for this state to have an excellent library system after the Haryana Public Libraries Act is enacted.

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ANNEXURE I

RECOMMENDATIONS OF THE SIXTH SEMINAR OF HARYANA LIBRARY ASSOCIATION ON 'PUBLIC LIBRARY SYSTEM IN HARYANA' HELD AT THE KURUKSHETRA UNIVERSITY, KURUKSHETRA ON JUNE 20, 1982

The Seminar noted the importance of public library service in the State of Haryana and recommended :

1 That Haryana being the foremost state in the country in economic and social development and progress should realise the need for a sound public library system and create a network of libraries in the state. For this the government should take steps to legislate a Haryana Public Libraries Act on the analogy of the Public Libraries Acts passed by the southern Indian states, namely Tamil Nadu, Andhra Pradesh, Karnataka and Maharashtra. This shall put the public libraries on a sound footing and contribute towards the welfare and progress of the state of Haryana.

2.1 That pending the formal legislation in the state the present State Central Library (SCL) and district libraries be given proper facilities by the government to develop scientifically and cater to the needs of the rural and urban public for the common good of the people of the state. These libraries be given adequate funds and staff to act as true agencies for propagation of knowledge among the people. Mobile library service for rural people should be started in the immediate future.

2.2 That the SCL should be given status and role to provide leadership to the district libraries in the state. For this the SCL should develop into the principal library of the state and be given adequate funds and staff worthy of its role and status.

2.3 That the libraries network shall have State Central Library at the apex and district block and village libraries in its chain of hierarchy.

2.4 The the state government should earmark and make available adequate funds, in the light of the norms prevailing in other countries 'or development of libraries system in the state. According to these norms 6¼% of the total budget of education is to be spent on the public libraries.

2.5 That the government is requested to start the district and city libraries in the districts and cities where at present no such library exists.

3 That the Harayana Library Association (HLA)should hold a seminar on 'Library legislation in Haryana' in the near future in order to create an atmosphere and public opinion for drawing the attention of the state government and the public towards the need for the library legislation in Haryana.

4 That the HLA may form a standing sub-committee consisting of the following librarians who may meet the proper authorities at Chandigarh and plead for the need of legislation in Haryana and take further follow-up action in the direction.

1 Mrs. Laj Gupta, Convenor, Deputy Librarian, MLN College, Yamuna Nagar.
2 Sh. Wishan Dass, State Librarian, SCL, Ambala Cantt. *Member.*
3 Sh. Sahib Ram, Distt. Librarian, Hissar. *Member.*
4 Sh. M. L. Pasricha, Asstt. Librarian, H. A. U., Hissar. *Member.*
5 Sh. Lal Chand Saini, M. D. University, Rohtak. *Member.*
6 Dr. Janak Raj, Kurukshetra University Library, Kurukshetra. *Member.*

That a copy of the above resolutions may be sent to the following authorities :

1 The Chief Minister, Haryana.
2 The Speaker, Haryana Vidhan Sabha.
3 The Minister of Education, Haryana.
4 The Director Higher Education, Haryana.
5 The Librarian, State Central Library.
6 Librarians of the district libraries.
7 All members.

ROLE OF LIBRARIES IN ADULT EDUCATION

N B INAMDAR
L S RAMAIH

0 INTRODUCTION

H G Wells said that 'Human history becomes more and more a race between education and catestrophe'. Education plays a crucial role in the development of a country. Democracy requires an enlightened i.e., a literate and informed citizenry. The significance of universal education and adult education was highlighted very early by the father of our nation, Mahatma Gandhi and architect of our national development, Pandit Nehru. Mahatma Gandhi described mass illiteracy as India's 'sin and shame' and wanted it to be eradicated.

1 THE PROBLEM

The population of India as recorded in the 1981 census was 683.8 million. 36.2% of the population are literates whereas it was only 29% in 1971. The extent of literacy and illiteracy between various age-groups in our society as revealed by 1961 and 1971 census are given in table 1 on the next page. Age groupwise figures for 1981 census are not yet available.

From these above census figures it is clear that adult illiteracy is a major problem in our country. There are about 400 million Indians who cannot read and write in any language. The illiteracy is staggering the democratic maturity and economic development of our country. The futurologists predict that 55% of all adult illiterates of the world will be Indians by 2000 A D.

2 LIBRARIES AND ADULT EDUCATION

The ultimate aim of the libraries, the temples of learning, is to carry knowledge to the doors of those that lack it and to educate all to perceive the right. The ideology of democracy and the aims of libraries converage and work for

Table 1 : Percentage of literates and illiterates according to 1961 and 1971 census

Age Group	*Literates*		*Illiterates*	
	Total Numbers	*Percentage*	*Total Numbers*	*Percentage*
1961 Census				
5-14	336.6	29.5	803.2	70.5
15-24	263.3	36.0	468.8	64.0
25-34	192.3	28.5	481.9	71.5
35-	262.7	22.3	917.7	77.7
1971 Census				
5-14	423.7	34.9	973.6	65.0
15-24	430.1	47.5	475.9	52.5
25-34	260.0	33.9	506.1	66.1
35-	366.2	24.5	1,126.7	75.5

the enrichment of the man and his welfare.

The integral connection between libraries and adult education was recognised at the international level as early as 1949 when delegates from 29 countries met in Denmark at the International Conference on Adult Education and passed the following resolution:

> This conference records its recognition of the essential contribution of musuems and public libraries in adult education. Appropriately to the circumstances of each member state the conference supports UNESCO's statement, 'The Public library is a living force for popular education' and recommends its consideration and as far as possible, its adoption in member-states, as a basis of policy.

This was the first resolution on the role of libraries in adult education to be adopted by an international group of educators, indicating its great importance not to any one country in particular, but to the world as a whole. Even though the picture with regard to a well-organised library service for the promotion of adult education is quite varying from one part of the world to another, nevertheless, there is universal awareness in all the developing countries of the vital role that public libraries have to play in the promotion of adult education, while at one end there are developed countries like the U S A, U K, and

Denmark with highly advanced systems of public libraries promoting the growth of adult education, there are at the other extreme, countries like our own where the awareness is yet to find expression in a well organised system of public libraries to promote adult education. If the Government of India ever attempt the enunciation of a national library policy, the most important aspect to be spelt out in such a policy is the role of public libraries in the growth and spread of adult education.

2.1 Role of Libraries

Many agencies are working to solve the adult illiteracy problem but few have the potentialities of public libraries. Libraries have been recognised as centres for: (1) continuous life long education; (ii) a source of authentic information; (iii) centre for research; and (iv) recreational reading. They provide the graphic material for continuous education of the cross section of the society. They take care of the literature required for students, scholars, professionals, women, children, blind, adult new-literates, etc. The reader groups like children, blind and adult neo-literates would require specialised literature and they serve their interests and needs. Hence the libraries in addition to functioning as normal centres for general readers would also function as centres for specific groups. The services of libraries in more than one way are related to the promotion of reading habit. They take all the care to encourage and sustain the reading interest of the neo-literates, to conserve them as active readers and users of information. They could even take the role of educating the adult illiterates and convert them into literates. As such libraries have a role to play along with other agencies in the field of adult education.

We say this because the advantages the libraries have :

(i) The availability of infrastructure e.g., buildings, furniture; staff, reading material, etc.;
(ii) The net-work of libraries under the public libraries system;
(iii) Existence of school, college and other types of libraries;
(iv) Libraries being uncontroversial public institutions;
(v) Availability of reading materials required at all stages;
(vi) Availability of audio-visual material;
(vii) As a general centre for community intelligence;
(viii) The facility to sustain the interests of new-adult literates and convert them as active readers; and
(ix) Availability of extension activities.

3 ADULT EDUCATION PROGRAMMES

The programmes and projects undertaken by the government both at state

and central have not involved the libraries so far. It is, therefore, difficult to achieve the targets aimed at. Even the neo-literates produced after intensive training programmes, are likely to lapse into illiteracy without being provided the required reading material which libraries alone could make them available. For effective and efficient implementation of the adult education programmes libraries should be considered as an essential component of the system. The government should provide the necessary wherewithal to the library in order to create necessary cells and to equip them with the required materials. In this context we feel that the libraries may not be able to conduct classes to teach the illiterates, because the libraries have to perform several other functions simultaneously for other special groups and general public. But the libraries would definitely be in a position to serve the neo-literates with all the reading materials.

The activities of the libraries for the adult neo-literates could be, by and large grouped under :

1 Indirect guidance services;
2 Advisory services to individuals;
3 Services to organisations and groups;
4 Library sponsored group programmes; and
5 Community advisory services.

The services to be offered by the libraries under the five heads are as follows :

(*a*) Graded readers to suit to various levels of readers with controlled vocabulary;
(*b*) Functional literature to provide information as to how to do things in their respective vocations;
(*c*) Reading laboratories to learn through programmed learning texts and supplementaries;
(*d*) Simplified classes to help them to read within a short span of time and to know the cultural past of their country. The adult is already tired of the day long work and this sort of material would be easy for him to read and sustain his reading habit;
(*e*) Display of exhibits like posters, paintings, pictures, jackets of new books, book exhibitions, etc., to motivate the readers;
(*f*) Preparation of reading lists to suit the requirements of the individual and groups;
(*g*) Provision of audio-visuals like; gramophone; tape record, radio, TV films, slides, etc., to create interest;

(*h*) Extension programmes like special lectures, bookreviews, celebration of cultural and national events, which draw the neo-literates into the orbit of library influence; and

(*i*) Drama, musical and dance programmes to attract the readers.

4 CONCLUSION

The activities discussed in the foregoing sections should of course be performed by the library keeping in view the cultural background of the community, the vocational needs and interests of the groups, and educational requirements of the society. To sum up, the library in the context of adult education should serve as the community intelligence centre. Through its services it should convert each neo-adult literate into a potential consumer of the knowledge and thereby contribute to the progress of the nation.

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ROLE OF LIBRARIES IN ADULT EDUCATION

P S G KUMAR

1 ROLE OF A MODERN PUBLIC LIBRARY

The view that the library is intended only for those who can read and write is obsolete and partially correct. A public library of today is regarded as a 'social service centre' for the whole community living in its vicinity where human activity is throbbed with life and animation for the uplift of the country.

2 CONCEPT OF A PUBLIC LIBRARY

2.1 THE ORIGIN

The industrial revolution in the west made the workers realise the importance of education in one's life. Result was the establishment of various night schools, public and subscription libraries, etc, which could quench their theirst for knowledge. These libraries at a later stage had taken the responsibility of running adult-education classes, community welfare services and so on.

2.2 A TEMPLE OF TODAY

The role of a modern public library is just what a temple had been till about a hundred years ago. In those days the temple used to be the nerve-centre of various social, cultural, and spiritual activities of a village. Under the present changed circumstances, the public library shall have to play a similar role. It has to enter into the very heart of the life of the village and should take special interest in adult education and the activities alike.

3 LIBRARY MOVEMENT IN INDIA

A glance at the working of the public libraries in India since the beginning

of the present century till we attained independence shows how our people had struggled hard to run them and to make them devote themselves to the cause of learning and for the fuller development of the individual. In fact, no activity which contributed to the reconstruction of the society was considered beyond the scope of the library's work. Library movement in Andhra Desa, Baroda, Bengal, Mysore and other states stand as a model worth emulating even to-day for running libraries as centres of learning. Adult education programmes were carried out in a systematic way.

3.1 Modus Operandi

3.1.1 *Attracting people*

The library worker used to go to places where the adults generally congregate for gossip, namely in the vicinity of the tank bund, the village banyan tree, the temple pial, or the like. By taking part in their discussions, he used to make his presence and knowledge felt in such a way, that, in course of time they could not do without him and were impelled to go to the library.

3.1.2 *At the Library*

After attracting the people to the library, the librarian used to read out to them daily passages from newspapers, periodicals and books on their choicest topics as convenient to the illiterates. Thus the habit of going to the library and interest in literacy were created in them.

3.1.3 *The Night School*

The third stage was running the adult literacy classes. Many of the adults in villages had their own occupations to pursue during the day. The adult is a man of business. The interests and attitudes of the village illiterate adults are so diverse and spread over such a vast cross-section of the society that no uniform preparation on the part of the adult education worker helps him to be successful. For this very reason special training programmes for village library workers in adult education work were organised in 1920s in Andhra Desa, and also in Mysore. Specially trained library workers used to organise night schools for adult education and literacy programmes with the cooperation of the social workers and educated youth. Thus the adult education programme was designed and organised in a systematic manner, and in a methodic way by public library workers in the past in our country.

3.2 The Present Scene

As is said 'India lives in villages'. About 80% of our population live on

village side. The percentage of literacy in our country is very low. Further, the literate population is mostly confined to cities and towns. Hence there is every need to make the vast majority of the population that lives on the village side literate with the ultimate purpose of making them better citizens.

4 NATIONAL ADULT EDUCATION PROGRAMME

Various governmental and voluntary agencies have been carrying out the adult education programmes since long. The latest being the National Adult Education Programme (NAEP) launched on 2nd October, 1971. It is a massive programme covering about 100 million illiterate adults within about 5 years. The project in the final year of the programme (1983-84) is envisaged to cover 35 million learners and involve over 1 million instructors, 40,000 supervisors and project officers. However, it is a matter of regret that the role of public library in such a programme was not visualised properly by the planners of this programme.

5 IMPACT OF LIBRARY LEGISLATION

Five states in India have public library acts in force. These are Tamil Nadu, Andhra Pradesh, Mysore, Maharashtra and West Bengal. Though legislation has improved the state of affairs of libraries and librarians; and increased the number of free public libraries, unfortunately it has failed to make libraries as institutions of social service. "The public libraries run by paid staff started executing their 'duties' in a routine way without any enthusiasm for social work. The public libraries which have been the centres for imparting adult education and camps of literacy campaign, till then, have turned into mere book issuing centres". The missionary spirit and enthusiasm which animated the library workers during the pre-independence days have become part of past history. A large number of libraries sprung-up at various parts of the country with the enthusiasm of social workers which were managed by 'private committees'. These libraries were neglected by the library acts of almost all the states. Further, village libraries established by gram-panchayats also lost their ground on account of compulsory deposition of 'library cess' as per the provisions of library acts. Thus great harm was done by library legislation to 'committee libraries' specially to those situated in villages which have to play a vital role in adult-education and various other social and cultural activities.

There cannot be two opinions about the need and utility of library legislation in any state. But, the only thing is that, the legislation should also take care of the committee libraries by making liberal financial assistance for their sustenance and improvement. The library system in the state should make adult education and other social and cultural activities an integral part of the over all activities of a library.

6 INTEGRATING LIBRARY MOVEMENT & ADULT EDUCATION PROGRAMME

The Library movement should be integrated with adult education programme. It has been found to be a great success in the past and it will be a success in the future as well provided the two programmes are planned well and coordinated at various levels. Following points are to be taken care while drawing such an integrated programme.

6.1 Training of the Library Workers

The village library workers should be trained in adult education and other literacy programmes so that he could equip himself fully for the successful execution of the task. The duty of a librarian, especially in a village is not only to lend books to those who can read but also to attract the illiterates to the library and to give them orally information and knowledge contained in the newspapers, books and periodicals. He should try to understand the information requirements of the adult literates and provide the needed information. Thus they will be initiated into the library and adult education programmes. Thus, a day will come when he will be one of the well informed citizens of the country.

6.2 Relapsing into Illiteracy

One further task is the work of arresting them lapse back into illiteracy. After spending time, money, energy, devotion and love in making people literate, if their lapsing back into illiteracy is to be our fate to see and their's to suffer, and if it is a veritable never-ending web, we have to weave and weave again, ours would be a meaningless job. Yet it is but the bare truth that the number of those lapsing back into illiteracy is appalling. We have to take up the gauntlet and meet this challenge.

6.3 Need of the Hour

A two fold programme is needed, the first of which is the creation and supply of adequate reading materials to sustain literacy. Every library in fact should have a special department to serve the illiterates and neo-literates. The second programme is to pay individual attention to every neo-literate.

7 CONCLUSION

In conclusion I quote late *Padmasri* Iyyanki's words which hold good until

we continue to have a class of illiterates in our society.

The modern library takes the place of the ancient temple. The librarian, just like the *Pandit* of the temple should sit on the pial of the library, and go on reading some attractive and useful information from books and periodicals and consequently the very existance of the library in a locality first catches the peoples' eye (*Drushyam*), then the ear (*Sravanam*) and ultimately the mind (*Adhyanam*) and thus our mission of eradication of illiteracy and adult education will be achieved to the maximum extent and content".

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ROLE OF THE PUBLIC LIBRARY IN NATIONAL ADULT EDUCATION PROGRAMME

PRAHALAD PANDA

1 INTRODUCTION

In 1966 at the Pan African conference held at Kericho, Kenya, education to rural development was recognised which says rural transformation is education and training in their multidimentional form—education to the adult farmer, adult businessmen, etc. education component in human life and national growth. On the other hand illiteracy is a growing problem in today's world. It is estimated that 437 million adult population is illiterate which speaks mostly the poorest and the most neglected section of the nation. The nation should deem it its solemn duty to impart education to them. The National Adult Education Programme (NAEP) which was founded on 2nd October, 1978 with the aim and objective to eradicate the adult illiteracy among the masses of India and to educate about 100 million adults of different sectors within a span of five years. This programme only can succeed upon an appropriate social environment, sincere motivation of adults, proper selection and training of workers, preparation of good learning materials, adequate supervision and guidance and constant monitoring and evaluation. The sociological prespectives of adult ehducation connotes that education is a continuing social process of learning through various means not simply through the formal institutional structures. The NAEP is also being operated by the Ministry of Education through the National Service Schemes (NSS) in Indian universities particularly for eradication of illiteracy.

The suggestion of Ministry of Education is to develop the capability in all states for preparation of diversified and need based teaching learning materials and development of training methodologies. The guide-line published by the University Grants Commission suggests to include the educational extensions for adult education and literary programmes and to organise training for various categories.

The NAEP is a welcome idea, but no one should seriously claim that it is in any sense original. On a relatively limited scale several experiments of this kind were made in the pre-independence and post-independent periods. To the Janata Government one may give credit for making a massive financial outlay towards this programme and for giving it a national spread.

2 AGENCIES

Since this massive programme stipulates a large investment, its operational content has to be carefully worked out. One of the most important point to be kept in view is that the programme is community-oriented. Agencies and instruments for this programme have to be so identified that maximum interaction takes place between the local community and the government.

The programme can be conducted through multiple agencies with precedance to voluntary agencies in so far as they are available. The public library being the (People's University), its involvement for eradication of the illiteracy will be more benevolent to the society. Many progressive ideas are embodied in our Constitution but the society is still far from accepting these ideas completely. The public library has a special responsibility in this respect. Until a few decades ago the role of the public library was limited to preservation of knowledge but it is now increasingly realised that the public libraries have to play an active role in dissemination of knowledge to the community and to accept this service as one of their important responsibility. It is an admitted fact that government alone cannot eradicate illiteracy from the country because of the huge funds required for the stereo-typed government managed institution big or small. Utilisation of free service of the public library hierarchy can faciliate the source of eradication of illiteracy.

The man-power involved in the public library system is very inadequate to eradicate the illiteracy physically. This can only be possibe with the help of mechanical devices available with the library.

No country, however, perhaps with the exception of China, faced the problem of illiteracy of the magnitude we are facing. To overcome the problem the prerequisite to motivate all persons to be involved in NAEP, is to engender a spirit of hope and confidence. The Prime Minister—Smt. Indira Gandhi and the Education Minister have already declared that the highest priority needs to be given to adult education programme.

3 APPROACH

Our country has a distinctive value system with a tradition of learning perpetuated through oral communication, fairs, festivals and informal skill training which dates back to the earliest days of human civilisation, enriched and

harmonised over the centuries by the contact of diverse cultures and religions. Production, and education are the distinctive feature of our cultural pattern. Lack of motivation and ignorance of educational benefits among illiterate adults is a great threat to the NAEP. The challenge can be easily met by the staff of the public library, in organising meetings, lectures, dreams, and audio-visual aids in order to motivate and attract illiterate adults towards educational benefits. When the illiterate are stimulated to participate in adult education programmes initially, their interest is not sustained and they tend to drop out. The problem is particularly for the women and scheduled castes and scheduled tribes persons. But if the programme is of relevance to the content and methods with the felt needs and problems of the learners, then it would fulfil the pre-conditions of sustained participation of the learners. So the literature of the plan and programme should be prepared in accordance with the needs and requirements of the adults. In giving effect to this endeavour, libraries, which are primarily educational institutions for intellectual advancement, have a vital part to play by disseminating facts and ideas in the community. The librarian now endeavours to propogate the knowledge for 'use' also make "open access" to all his materials. The sub-division, panchayat and village library staff can play an important role in this regard. They can undertake the responsibility to teach adults in their vicinity because they can prove best as they know the illiterates personally and can treat them according to their needs.

In the governmental level, agencies of adult education implementation have been given under the NSS, Nehru Yuvak Kendras, universities, and other educational institutions. It is statistically found that more illiterate persons are available in the rural areas. The work entrusted to the agencies are quite far from the vicinity. Only on theoretical basis a number of developmental plan and programme are made for implementation of the adult education programme and eradication of illiteracy. A number of night school centres are being organised. But it is seen from the practical angle that the school and centre are in existence in pen and on paper and their outcome is very negligible.

The relevance of the library and its expanded services can be reviewed in fulfilling the aims and programme of the NAEP. When we accept the viewpoint philosophically experience being 'Education' then the adult education institutions are all libraries. This would logically accept the best agencies for development of adult education among all. So it can be accepted that library must take the lead in stimulating and helping to shape the desire to learn on the part of the people of its community. The public library can be made focal point in the adult education movement involving wide-spread literacy, free library service, an abiding love for books and reading.

The paramount importance in all developing countries of the "life long learning for surviual" and so the library service should be accepted,

The Government of India had a budget provision of 21 crores during the year 1980-81 for development of adult education in India but the department could not spend the amount during the financial year 1980-81. During the 6th plan period the government had decided to spend a sum of Rs. 3,500 crores for development of education and out of that grant it has been decided to spend 230 crores for the development of adult education.

4 RELAPSE WITH ILLITERACY

It is seen from the financial report of the government that crores of rupees are spent every year in imparting education at different levels, to a great extent they are wastage because the large majority of beneficiary leave off their education in the middle. Those who complete have no libraries to fall back upon to consolidate and increase the gain acquired as a result they relapse into illiteracy.

5 CONCLUSION

It has been found that public library is accepted as an important agency in the development of adult education in U.S.A. In India it is found that only a few states have a public library set up. The Education Department or Cultural Affairs Department of the state governments, where library is an organ, is over burdened with other works. So unless a separate directorate for libraries (As in case of Andhra Government) is created, having a wing for development of adult education, eradication of illiteracy will be quite impossible. Through the library and with the help of audio-visual aids the rural adult people can become literate and educated. If the literate percentage will not increase, implication of scientific methods to grow more, to earn more, to produce more can not be possible. The responsibility of establishing, maintaining and developing an adequate library service is vested on the state governments which is necessary to set up a net-work of libraries in the capital, districts, reaching down to a village. This library set-up should be a limb of the library directorate. The development of adult education should be an extension service of the public library. The librarian in-charge of the library should be entrusted with over all responsibility for actual functioning of the extension service. If necessary he should be trained with the technique of the adult education programme. The regional resources should be considered for acquisition of literature.

Implementing and organising the above suggestion broadly outlined, the public library system in the state can be improved and the adult education programe can be implemented through the extension service of the library which will be most universal, most accessible and most economical.

SOCIAL PROSPECTS OF THE PUBLIC LIBRARY IN A DEVELOPING SOCIETY

TARUNKUMAR MITRA

1 DEVELOPING SOCIETIES

Developing societies are many and they differ among themselves in their respective stages of development. Yet it is possible to identify some of the problems which are symptomatic of such developing societies[1]. Those problems are invariably rooted in their economic backwardness and inseparably associated with the known maladies of this backwardness. The very term 'developing society' is customarily understood in the economic sense and, in reality, it is no more than a gentle substitute for 'underdeveloped society'. This term, which has become almost conventionalised through indiscriminate use, to identify economically underdeveloped societies, obscures the fact that many of these societies with their rich cultural heritages have occupied lasting place in the annals of human civilization. In fact many of these societies had been craddles of civilization, and their present state of underdevelopment is only a legacy of the recent past, heralded by the rise of the West followed by the North at the expense of the East and the South. In human potentiality people of these societies do not compare unfavourably with that of any developed society, what they lack in is that kind of knowledge which go hand in hand with material prosperity. The problems of the developing societies in this respect are, therefore, those of acquiring the ways and means for their material development, and promoting that kind of knowledge by means of proper utilisation of those ways and means, which in turn help them to use those ways and means to serve their best interest. Here actually such societies enter the realm of dilemma, since the kind of knowledge which is entirely supported by the material prosperity is itself the means of using it properly, and this forms what may be called a vicious circle.

The nature and the character of the international politics has changed completely since World War II, and so have also changed the meanings of such words as imperialism and exploitation. The crude and brute military methods of force, coercion, and intimidation have been replaced by a finer but incomparably superior, penetrating, deep-reaching, durable method under the cover of international economic cooperation between the rich and the poor nations. If and when the working of this finer instrument is threatened to be disturbed for national or international reasons, the army unhesitatingly comes to its aid. To the poorer nations the attitude of the rich nations, whether capitalist or socialist, in this respect is the same. Yesterday's Gods moved hand in hand with the Generals alone, but to-day's ideologies move hand in hand with the military and the economic aids. Standing on this ever shaking international political bedrock, utterly confused by the atmosphare reverberating with high sounding political slogans, developing societies struggle for their existence and self determination.

2 DEVELOPMENT OF PUBLIC LIBRARY SERVICE

It has often been lamented that inspite of much concern and efforts of the UNESCO very little progress has been made in the developing countries towards the development of public library service. The basic social causes for this failure has been little understood by most of the experts from developed countries, with few exceptions, psychologically and socially conditioned by the traits and traditions of their own societies.[2] The point, here, is not to blame any one or any country, but only to understand the conditions under which the developing societies ars to carry out the task of the development of public library services for themselves. On the global stage the same old drama is being enacted in a new setting and in a new name and with the same parties, the strong and the weak, with their same old pattern of behaviour. After all man has not ceased to be an animal.

The Unesco Seminar on the Development of Public Libraries in Asia (Delhi) 1953[3] recommended :

(1) Development of adequate public library service for the use of all people on a free and equal basis, supported by national public library legislations; improvement of training facilities, status and salaries of librarians; adequate production and supply of reading materials through the establishment of national production centres; and
(2) Provision of services for the children by all public libraries.

These recommendations supposed to have indicated that provided with the necessary means as laid down therein, the end, that is the establishment and operation of an effective public library service, is guaranteed. After thirty years,

the very state of the development of public library service in Asian countries perhaps with the exception of Japan and to some extent Iran and Hong Kong, has sufficiently proved the superficiality of the recommendations, and the inability of the Seminar to explore the deeper socio-cultural stratum on which the public library service should stand. The reasons for the failure of the Seminar to look deeper could be foreseen, since the participants were engrossed with the institutional concept and image of the public library in UK, USA, and Scandinavia in particular, and of the developed countries of the West in general, and were, therefore, unable to take a different view of the organisational problems of public library service in Asian countries, with a deeper understanding of the socio-cultural contexts, in respect of which Asian countries essentially differed from their European and North American counterparts.

The question seems to have never dawned if and whether the institutional form and pattern of services which the public library has assumed in the Western countries, as an evolutionary product of their social process, should be suitable for and viable in societies characterised by different social and historical conditions. Implicit faith in the instrumentality of this institutional form with its traditional pattern of services has been responsible for preventing to think of or to try with other possible alternatives[4]. It was forgotten that the way in which a religious or a political faith could be rehabilitated, the 'library faith' could never be. Library faith is not rooted in any dogma, therefore, there is no way to establish it by means of sheer propaganda under the cover of social welfare, or holding out any prospect of salvation, or with the assurance of a trouble free 'life' in the other world, at the expense of some other faith equally rooted in dogma. It can be accepted, sustained, and promoted if and when the society is ready to do so with the conviction that general good shall be derived out of it. And to be so it requires to have an institutional form with a pattern of service that agrees with the culture of a society. Unfortunately the institutional form of the public library with its pattern of service, which we find in the developing societies, has no where been a product of natural social evolutionary process of their own, but something imported and grafted on the surface of the society, here and there, to serve invariably the interests of that segment of the society which could have the privilege of being conditioned by the cultural traits of the mother society of the institution[5].

The public library in the developing societies exists to-day as a by-product of political accidence and not as the homogenous product of a social process. They have been tended every where by politicaily strong social minority whose interests they have served all along, with orientations when necessary, to serve their special needs, and it is this minority, apparently the only vocal section of the whole people, which is interested in maintaining and promoting the borrowed institutional form of the public library while the rest of the people stand by or rather are made to stand by totally unconcerned.

Special libraries and documentation centres can develop even if the people in general remain aloof since they never come close to their day to day life. They can maintain their hothouse growth like the higher education in the developing societies. But the public library can not be grown in the hothouse. It needs natural air and open sky. It grows and lives with the people. This basic difference between the two accounts for the prosperity of the former and the poverty of the latter in the developing societies.[6]

The dominant minority of social elites composed entirely of the middle-class with its petty bourgeois psychology professes change but worships the existing static order with the propensity to shed revolutionary tears for the people while inherently abhoring to forego a fraction of their own class interests.[7] The system of higher education, which most of the developing societies have received as the inheritance of their recent colonial or semi-colonial past, has been under the exclusive command of this dominant minority and, therefore, has occupied a vantage point in the order of social priorities considered from the political point of view, and has prospered, inspite of great drawbacks, considered from the point of view of over all social or national interest. One of the rearons for the prosperity of the special libraries and documentation centres, and libraries attached to the institutions of higher education, in the developing countries may be found in their relationship with higher education. The reason which appears to hold good for the development and expansion of higher education, appears also to be the same responsible for the poor state of elementary and primary education, which is thought of more or less as an affair of the masses in the developing societies.[8] Since the public library is generally eugologised, and that perhaps truly, as the 'university of the people', it has attracted little attention for the very same reason. The bureaucratic attitude towards the public library, in many of the developing societies, has been one of treating it as no more than an instrument to resist reversion into illiteracy, rather than as a multifunctional cultural agency.[9] It is natural, since the bureaucracy itself in the developing societies is a part and parcel of the dominant minority and is, therefore, incapable to think of the public library in any other way. It reminds the saying of P. W. Bridgman that "the true meaning of a term is to be found by observing what a man does with it, not by what he says with it".[10]

The dawn of social awakening in the developing societies, without exception, perhaps has been the 'Dawn' for the few living on the crest of the social pyramid. Not to establish a hegimony over the enlightenment, but to scatter its glory to enlighten the whole social structure should have been the mission of those privileged few. This responsibility is acknowledged, but the paradox is that conditioned by the traits and traditions of their class they fight shy and are unable to move forward with the determination to convert a 'should' into an 'is'. To think of the public library as a means to achieve this end needs for a thorough change of outlook and this is possible only if we do not cease to question the

validity of something in our respective social contexts which has been branded as tested and proved effective elsewhere in different social contexts. Perhaps we need a cultural revolution.

So much so for the deeper social reasons, which working at its very roots, have been affecting the development of public library service in the developing societies. Now let us take into consideration certain less important but more specific questions involving methodological factors.

To the ideals of the public library great tributes have been paid in the Unesco manifesto on the public library, and the ideal public library rightly deserves those. The Delhi Seminar (1955), which was one of the many of its kind, exemplified in its recommendations a sample of methods prescribed for universal application in the developing countries for the establishment of effective public library service. All those are all right, but all those are not all.

The ideals of the public library seek their fulfilment not in the refinement of methods but in the service to man.[11] Methods are important as instruments to render service, and when those are found incapable to render the desired service there must be serious reasons to doubt their efficacy or sufficiency or both. Long and faithful adherence to methods generates a faith in the infallibility and self sufficiency of the methods and obscures their goal[12]. Here we meet the end of the behaviorist stand, and its inability to look beyond the method into the man, with the belief that provided with the same means man will react mechanically and equally irrespective of differences in their social conditions. In other words the behaviorist proceeds to extricate methods from their social contexts and to endow those with the aura of a scientific sanctity born of the dogma of mechanical principles.[13] The whole corpus of the institutional traditions and practices of public library service, which the developing societies have received from the developed ones without questioning alike some sort of transferred technology, suffers from this behavioristic prejudice. The problem with the social institutions is that they "tend to change slowly, and-most importantly—they tend to continue to exist long after the necessity for their existence has disappeared, and sometimes even their continued existence becomes a nuisance and a danger. . . The continued existence of obsolete institutional habits and forms. . . is called. . . "cultural lag"".[14]

3 CONCEPT OF A PUBLIC LIBRARY

If we cast aside one by one all the ornamental words from the acceptable definitions of the public library, ultimately we will discover this very simple but profoundly meaningful concept that 'the public library must be free in all respects to all'. To be free from all private financial obligations it must be established and maintained out of the public funds; for being established and maintained as such it must have a legal basis; to be intellectually free it must not be

subjected to any form of censorship; to be culturally free it must harbour material for all, subject to local conditions and needs of course; to be linguistically free it must have adequate supply of literature in the local language or languages; and to be ethically free it must serve all, far and near, fit or handicapped in any way. But in practice no public library can be so exclusively 'free'. We know that formidable barriers—physical, financial, social, cultural, educational, intellectual, linguistic, and others—stand in our way to the goal of the public library service. Harder though the passage in the developing societies due to their economic and allied backwardness, it is not smooth enough in the developed societies either. Utopean may appear this concept of the ideal public library, yet the task before us, those who have faith in the public library movement, is to struggle for attaining the seemingly unattainable.

The problem for the developing societies is to see how much service can be rendered with what resources they have. This calls for devising methods which may be quite different from the ones being applied in the developed societies, but may be more relevant to and effective in their own respective social conditions. Let us now turn our eyes to our own Indian situation, for India is acknowledged to be a developing country herself.

4 INDIAN SITUATION

As early as 1910, Baroda—then a princely state within the British India, was lucky to have received the princely gift of a public library system from her benevolent ruler Sayaji Rao Gaekawad. In essentials the system was somewhat of a replica of some of its kind then existing in USA, and UK. A foreigner in the Indian soil, it was also nurtured under the superintendence of a foreign expert,[15] If a classification scheme is agreed to be regarded as a social product and, therefore, to mirror in its structure the cultural pattern of a society, then how little Boden had the understanding of the Indian society and culture is evident from the classification scheme he devised for use in Baroda libraries[16]. How much the people of Baroda in general came to be enlightened through the instrument of this library system, in comparison to the rest of the Indian people, history does not help us with any testimony to know that. Perhaps not much. No other Indian State or Province followed suit. Baroda with her public library system stood alone in a state of glorious isolation. Like the diamond on the Imperial crown it was to be admired but not to be desired to possess. In short, it did not have any perciptible amount of stimulating influence, in general, even on the more or less enlightened section of the people of India and, therefore, it is better not to speak of the interest of the mute masses in it with their apalling poverty and illiteracy.

This was natural, since the country which was to be periodically faced by floods, famines, and epidemics, which was to live on imported salt, and which

was to pay in blood and sweat the price for the glory that was the British Empire, there were other problems before the people more engaging and more immediate for giving attention to. England was then at the zenith of her power, and for the Imperial administration in India, therefore, to be remotely sympathetic to the cause of the public library development, was an absurd and insane possibility[17]. And our Indian Princes? they could boast to have just as much love for their people as did the Queen have for her Indian subjects. As for education, England was ready to offer only that much and that kind of it which was necessary for the safeguard and promotion of her imperial interests. It was designed to produce a band of loyal clerks, in order to rule India by the Indians, and to that extent it was eminently successful. Exceptions, if there were any, only proved the rule. Therefore, there is no cause for either to be proud of what Baroda did not socially achieve but accidentally received as a private gift, or to deplore the social attitude of reluctance in the rest of India to follow the footsteps of Baroda. The simple fact is that the ground was not ready to grow a homogenous public library service.

However, what happened in Baroda could not and did not pass away completely unnoticed or without leaving any impress on the mind of a small section of that middle-class community which was traditionally conditioned to honour education and which eventually adopted the task of development of public libraries as an insignia of a respectable social service since the middle of the nineteenth century. This love and regard for the public library, a characteristically British trait, which they imbibed from the Englishmen during the process of their contact with them, was another golden lining in what is known as the Indian Renaissance, more truly the Indian Middleclass Renaissance.[18] Therefore, from 1910 onwards we mark a slow but steady spread of the public library movement throughout the length and breadth of the sub-continent, under the patronage and care of this minority, remaining within a social confinement hedged by the middleclass interests.

5 LIBRARY LEGISLATION IN INDIA

Towards library legislation the first official move was made in India in 1931, in Bengal. Madras was the first state in India to adopt a Public Library Act in 1948, followed by Hyderabad (1955), Andhra Pradesh (1960), Karnataka (1965), Maharashtra (1967), and West Bengal (1979). In 1958 the Government of India appointed an Advisory Committee on the development of public libraries, the terms of reference of which conformed to the recommendations of the Delhi Seminar (1955). Torrents of word have, meanwhile, been poured over the development of public library service in the Five Year Plans, and many of the states now have some sort of public library system, But the question is has it been possible through these legislative and other governmental methods to get

the benifits of public library service reach the vast majority of our people staying outside the middleclass confines, those people who need the public library service most? The simple answer is 'No'. The failure of our sacrosanct methods in reaching out to the people has been stagerring. Perhaps the cummulative services of our public libraries have not been able to reach even the tiny fringe of only one percent of our vast population, eighty percent of which is rural. This, however, may not prove the total futility of the methods applied so far, rather this definitely points out their great limitations. This proves that legislative measures or governmental machinery alone are not sufficient to establish and expand an effective public library service without the concern, sympathy and support, and last but not the least, the urge of the people.[19] The first task before us, therefore, is to make every effort to create that vital fund of people's sympathy and support in order to draw upon it for the life and growth of our public library systems. To do this, we have to identify the barriers that stand on the way of expanding the public library service to the people, then to earmark each of those in an order of their negative importance, and finally to remove them one by one. Here again we confront the question of methods, but of different kinds.

6 EDUCATION FOR LIBRARIANSHIP

Firstly, from the beginning the education for librarianship in India has been out and out a bureaucratic edcuation.[20] An examination of the curricula of our library education courses will at once expose how overwhelmingly those are burdened with dry methodology and mechanics of library operations, and how devoid those are of any thing that could instill in the mind of the students and foster a philosophy of library service. Such an education could produce no more than library clerks in the name of librarians. The behaviorist's faith in and over dependence on methodology tends to push philosophy out of the arena of human activities.[21] The human significance of librarianship lies burried under the dead weight of methodology.

Secondly the curricula do not bear any relevance to our social situation and needs. If a visitor from the Mars is handed over with a copy of the syllabus of any Indian library school, he will at once have the impression that India is a highly developed country, with a network of great libraries suffering from the fall-out of information explosion, nothing as human problem exists before the library profession, and therefore, the library education has to be only one for improving upon the methodology in order to improve service.[22] Whereas, in fact, ninetynine percent of Indian libraries do not have any scope to suffer from the maladies of information explosion and problems of bibliographical control. We have been offering a library education irrespectively to all which may only be needed by a few.

Thirdly the propriety of requiring the teachers in library science to have a sound professional background has never been given due importance. As a result, to-day we find many teachers without having adequate or any field experience at all. Without the support of this field experience teaching becomes absolutely bookish, and teachers are left with no other alternative but to fall back upon abstract methodologies completely devoid of any knowledge in respect of their social relevance. In the circumstances theories cannot but tend to proliferate and ultimately disproportionately outgrow all practical social considerations.[23] Precisely such has been the situation in India, testimony to which is borne by the Indian library literature itself.

An education of the kind noted above, above all, is absolutely inadequate for public librarianship. In the Master's degree level course only public library system is offered as an optional subject. Has it ever been questioned how many holders of the degree of Master of Library and Information Science shall ever be willing to adopt the carrier of public librarianship, which is seldom deemed to be a promising one in the context of our poverty stricken and little cared for public library service? I think that it would be a more meaningful feat if we could design and offer orientation courses for the working public librarians, conducted on discursive principles. The real measure of our concern for the development of public library service should be our real efforts.

If the public library is sincerely believed to serve as the university of the people, if it is to be recognised as the commonwealth of Man, then the right to use the public library by all must be accepted as one of the fundamental Rights of Man in a civilised society. In order to honour this 'Right' the public library must not only be *free*, its resources must also be made accessible to all. The first of these is easier to introduce but the second is much more difficult to achieve.

7 ROLE OF THE PUBLIC LIBRARY

The greatest difficulty lies with the letters which stand as an impenitrable barrier between the vast majority of unlettered population, in the developing countries, and the intellectual matters enshrined in books. In its present institutional form public library service is almost totally conditioned by the tradition and custom of the letters. One of the causes of the traditional passivity of the public library may be found in its almost ritualistic dependence on the instrumentality of the letters as the only means of communication, which eventually drives the library to transfer the final responsibility of activising itself to the ability of the users. In order to establish a helpful communication between a predominantly unlettered people and the library, it is, therefore, necessary to break through the barrier of the letters that segregates the universe of literature from the world of the unlettered people. In the developing societies this work of

penetration can best be done, and most economically too, by the efficient use of human agency,[24] and this holds out a most challenging and promising possibilily for the public librarianship in the developing societies.

The concept of the public library mainly as a means to check the possibility of reversion into illiteracy, is extremely poor and ill-founded. To think of the public library as such betrays only a contempt for the unlettered people. Verily this is a most unhelpful and undemocratic attitude. It may be that the public library equipped with adequate supply of literature for the neo-literates may minimise the possibility of reversion into illiteracy, but this should be regarded as a secondary role of the public library, even in the developing societies, and never as the primary one, that is the enrichment of culture. Can literacy be equated with culture? If that be so then the whole foundation of the Indian culture will collapse.[25]

Inspite of overwhelming illiteracy Indian people as a whole has given enough evidence of their intellectual potentiality. In fact, there is a distinction between education and literacy. It is a snobbery to equate education with literacy, which is a peculiar product of the Babu-culture.[26] There is no bar for an unlettered man to be educated provided he is allowed and helped to draw upon the common fund of social knowledge, which incidentally happens precisely a library's stock in trade.[27] The great history and culture of the Indian people itself is an evidence of their great intelletual potentiality. No mansion can stand on quicksand. India had developed informal but efficient systems for and a great tradition of educating her people. If we are willing to, and if we are not still now entirely confounded by the impact of the crushing present, we may look back to our own history for instructive lessons, in order to make the public library an irresistible social educative force. In fact, all the multi-fold functions of the public library of today lead to fulfil one single purpose that is education.[28]

8 CONCLUSION

Public librarianship is not only a practise in science and techniques of library operation with its code and methodology, it is also a social art which has its own human aesthetics. Machines never smile. A public library becomes a real object of love to the people when only it learns to smile. But this simple truth is often forgotten. The whisper of love is hushed down by the dictation of bureaucracy.

The philosophy of our machine age has its impact, like on every other of our social institutions, on the library, and there has been a growing tendency during the last three decades, as will be evident from the curricula of library and information science courses, to reduce the library as much as possible into an industrial institution characterised by its mechanical logic, laws, methodology, and operational principles.[29] The public library, at least, can never be such an

institution. A tiny public library in the heart of a hamlet can be an object of great love to its people, which no industrial establishment can ever be. An industry feeds on our want, but the public library feeds on our love. It is, precisely for this reason, a public library cannot be conceived of primarily as an information centre too, though it cannot dispense with information service altogether.[30] The philosophy of public librarianship stands on the recognition of the Dignity of Man. It is no less significant that the public library as a social institution emerged almost contemporaneously with the concept of the Rights of Man. In the annals of human civilization, till to-day, the public library is, perhaps, the last institution of great human significance. It is, therefore, not for nothing that the great poet and philosopher Rabindranath Tagore in his message to the First Baroda State Library Conference felt the need of reminding us that it took countless eoans before the God could smile on His first flower after he had created his grand physical world. Let us not over look the significance of this message if we sincerely intend to build a meaningful public library service for our people.[31]

NOTES AND REFERENCES

1 For a general survey of the problems with special reference to development of library services in the developing societies *see* the excellent work by Lester Asheim *Librarianship in the developing countries* (University of Illionois Press, 1966). Conditions in the developing countries have not changed much since 1966. For a review of Asheim's work *see* John Dean, *Unesco bul. for lib.* 22, 2; March-April 1968. Ronald Benge in his *Libraries and cultural change* (Clive Bingley, 1975) discussed in brief most of the problems (Chapter 11) though with special reference to African countries, those are also true equally for developing countries in general. In Chapter 9 Benge discussed in general the social factors largely responsible in determining the courses of library development which also throws light on the problems of development of public library services in the developing societies. S. K. Mookerjee in his *Development of libraries and library science in India* (World Press, 1969) summarised the problems of development of public libraries in India (pp 167-168). As opposed to the problems faced by the developing societies in developing public library services consider, for the sake of comparison, the problems which the American libraries face on the wake of sociological and institutional changes, Ralph W. Conant, 'Sociological and institutional changes in American life : their implications for the library', *ALA bul.*, 61, 5; May, 1967.

2 Benge, *op. cit.* pp 36-37. G. Chandler in *Libraries in the East : an international comparative study* (Seminar press, 1971) : surveyed the recommendations which have been made at different Unesco seminars on the development of library services in the East, and state of the development of library and information services in seven Asian countries (The Lebanon, Egypt, Iran, Pakistan, India, Thailand, Hong Kong, and Japan) in quantifiable factual terms without accounting for the social factors determining the courses of library development in these countries. Other notable works of this kind are : Evelyn J. A. Evans, *A tropical library sevice : the story of Ghana's libraries* (Andre Deutsch, 1964); D. Kaser *and others, Library development in eight Asian countries* (Scarecrow, 1969), the countries being Korea, Philippines, Taiwan, Vietnam (South), Laos, Thailand, Malaysia, and Singapore; Edward R. Reid-Smith, "Library development in Afghanistan", *Unesco bul. for lib.*, 28, 1; January-February 1974, 17-21; P. Bixler ed., "Libraries in the Far East : an inquiry into the state of the library art

in Burma, Taiwan, Communist China, Korea, Indonesia, and East Pakistan", *Lib. jnl.*, 87, 20; 15 November 1962, 4123-53. An outstanding example of the misconception is to be found in the remark of F. M. Gardner that "In India and Pakistan there are too many libraries, not too few, with the result that spending is too diversified", *in* "The place of the library in the educational, sociological and economic development of the underdeveloped countries" *in Librarianship overseas* (LA 1964. 9-17), *see also* in retrospect two other articles by Gardner, "Asia and the modern public libraries", *Jnl. of Ind. Lib. Assocn.*, 1, 1; October 1955, 13-24; and "Public libraries in perspective : a candid commentary on a tour of South Asia", *Unesco. bul. for lib.*, 14, 4; July-August 1960, 145-152. How far the basic social problems confronting the development of public library service in India were understood even by no less an Indian personality than Ranganathan himself is doubtful. *See* S. R. Ranganathan, "Fifteen-year library development programme for plan periods 4-6", *Lib sc. with a slant to doc.*, 1, 4; December 1964; 281-338. It is not for nothing that Sir Girija Sankar Bajpai long ago felt the need of reminding us that we "could do little more than proclaim the need or assist in the formulation of plans". *See* the inaugural address delivered by Sir G. S. Bajpai at the Third session of All India Library Conference held in Delhi, in 1937. *Mod. libn.* 8, 2; January 1938, 8-11.

3 *Public libraries for Asia* (Unesco, 1956)

4 This is called institutional inertia which has been defined in the *American college dictionary* as an "organised pattern of group behavior, well established and accepted as a fundamental part of culture". The inflictions of the librarianship in the tight grip of this inertia has been commented upon by A. Graham Mackenzie *in* "Progress in documentation: whither our academic libraries? A partial view of management research", *Jnl. of Doc.*, 32, 2; June 1976, 126-133. Some welcome signs to overcome this inertia in the developing societies are visible. *See* for example A. C. Ray, "Limitations of some library concepts", *Ind. libn.*, 16, 2; September 1961, 106-108; and Rita C. Enwonwu, "The role of Nigerian libraries in the adult education", *Unesco bul. for lib* , 27, 6; November-December 1973, 331-334.

5 In India, for example, the institution of the public library was imported lock, stock, and barrell from England. It was at first to serve only the needs of the European communities settled, especially, at the seats of political power and mercantile activicties. Later on the institution was adopted by the 'middle class', for the origins of which *see* N. K. Sinha *ed., The History of Bengal (1757-1905)* (University of Calcutta, 1967. p 402). For the early history of the public library in India *see* A. K. Ohdedar, *The growth of the library in modern India : 1498-1835* (World Press, 1966); *also* Mookerjee *op. cit.* Chapter I.

6 Chandler. *op. cit.*

7 H. I. Schiller in his *Man, communications and American empire* (Kelly, 1979) observed that "the road to social use to technology runs through the rugged terrain of interest groups, privileged classes, national power, and self satisfied decision-makers" (p 150), In essence the ovservation appears to be equally true for the middle class political and social attitude towards the expansion of the public library service to the masses. Did not Karl Marx define the petty bourgeois as "nothing but social contradiction in action"? Karl Marx and Frederick Engels, *Selected works* (Foreign language publishing house, 1955. Vol 2, p 425). Even in the United States libraries are still now for the middle class and of the middle class. Inspite of the awareness that libraries should render services to the lower class, not much progress has yet been made to that end. In some places children are the principal users of the public libraries, and it is significant to note that in the giant cities of the North, East, and West, and in most of the Southern cities seventy percent of the pupils of the public schools come from the working class, of which fifty percent again from the slum families. *See* Ralph W. Conant *ed., The public library and the city* (MIT press, 1965).*

8 In the post independence Iudia higher education has received much more attention than the elementary and the primary education. This is clearly evident from the very slow

progress of our literacy campaign. In contrast consider that in 1919 Lenin had signed a decree to literate the people and by the end of 1939 illiteracy was eradicated in USSR. Though in a much smaller scale, a more recent example is Cuba which was declared free of illiteracy in 1960. Benge, *op. cit.* pp 104-108.

9 See Chandler, *op. cit.* As early as 1930 primary necessity of the rural libraries to strengthen the literacy movement was admitted by Parkhi. R. S. Parkhi, "Necessity of rural library", *Mod. Libn.*, 1, 2; December, 1930, 22, N. K. Siddhanta in "National library commission" (*Ind. Libn.*, 7, 1; June, 1952. 6-8) observed that in "India . . . the library has a multifold function" which included "educational experiment on a 'pre-book' basis, keeping in mind the social structure and economic environment of the community", secondly "to keep the seeds of literacy alive", and finally to cater to the needs of the students and the elites. *See also* Mookerjee, *op. cit.*. Frank W. Jessup has summarised the multiple functions of the public library in "Libraries and adult education", *Unesco bul. for lib.*, 27, 6; November-December 1973, 313-314.

10 Quoted by S. I. Hayakawa in *Language in thought and action* (George Allen & Unwin, 1972. p 179).

11 The problem with any social institution is that once its working methodology is developed its philosophy falls behind. The methodology gradually recedes to the domain of specialisation and is acknowledged to be an exclusive affair of the experts. Robert G. Snyder's observation on the liberal democratic theory and its recent varieties of democratic elitism in regard to political economic system, also hold good for the public library. *See* Robert G. Snyder, "Knowledge, power and the university : notes on the importence of the intellectual", *in* Gunter W Remmling *ed.*, *Towards the sociology of knowledge : origin and development of a sociological thought style* (Routledge & Kegan Paul, 1973. p 344). Perhaps here we may look for one of the reasons for the gradual alineation of the public library movement from the main stream of social developments in India during the last three decades.

12 The best example of this is to be found in the attitude of the Indian bureaucracy, the iron framework which was created by the British Government. It has not only withstood the criticisms of the politicians from Jawaharlal Nehru to Jyoti Basu, but has also confounded them.

13 Floyd Matson. *The broken image* (Anchor-Doubleday, 1966. Pt I, pp 3-13).

14 Hayakawa. *op. cit.* p 246.

15 Willlam Alenson Boden.

16 According to Wilhelm Dilthy all human and social sciences are manifestations of life. *See* Wilhelm Dilthy, "The fragmenatry nature of life", *in* Gunter W Remmling. *ed.*, *Road to Suspection* (Appleton-Century-Crofts, 1967. pp 72-84). A classification scheme can not be an exception. For the classification scheme of Boden *see* W. A. Boden, *Scheme of classification for the libraries of Baroda State* (Baroda 1911).

17 On August 23, 1854 Jaikissen Mukherji proposed to the government that he was ready to bear a part of the expenses for the establishment of a public library if the government were agreeable to grant a monthly expense of Rs. 30/- only towards meeting the establishment charges. His proposal was turned down with the observation that it 'was doubtful if the government would be in a position to encourage the move'. Nilmoni Mukherjee, *A Bengal zamindar : Jaikrishna Mukherjee of Uttarpara and his times (1808-1888).* (Firma K. L. Mukhopadhyaya, 1975. p 173). In 1910 there was no reason why this attitude of the government should change. The First All India Conference of Librarians, which was initiated by Asa Don Dickinson, and which was largely attended by officials other than librarians was a political gimmick. This unhelpful attitude of the government was maintained till the advent of the independence. Traditions, however, die hard and it is worth noting that after the independence only five States in India have been able to introduce Library Acts.

18 In a recent interview Prof. R. K. Dasgupta, the erstwhile Director of the National Library of India has rightly observed that we did not have the 'library ethos'. *Ajkal* (Bengali daily), Sunday, August 22, 1982. See also Ohdedar, *op. cit.*

19 L. N. Gubli Sundaresan (Secretary, All India Rural Library Service Association) in "Towards a mass library movement" (*Ind. Lib. Jnl.*, 3, 4; January 1935. 3-4), had pointed out long ago the limitations of governmental and legislative methods in promoting a mass library movement. He had also emphatically put that "Public libraries should not be like Madras University library or the Connemara Library, libraries for a library oligarchy, designed out of the public money for academic few, or for only a percentage of the academic few." (p 3)

20 For the nature and character of the bureaucratic knowledge *see* Michel Crozier, *The bureaucratic phenomenon* (University of Chicago press, 1964).

21 Snyder. *op, cit.* p 344.

22. Snyder observed (*op. cit.* pp 445-446) that "A basic quality of methodistic logic is its anti-historical and anti-contextual bias. Underlying this assumption of the separation of fact and logic . . . to admit a developmental contextual basis of knowledge would somehow mean denying the constancy of reality and immutability of human behavioral laws." The very foundation of library science is supposed to stand on these laws.

23 In social sciences participation in the social process is essential. *See* Karl Mannheim, *Ideology and utopia* (Harcourt, Brace & World, 1936. p 46). *See also* for the controversy over the relationship between the theory and practice in library edcation, Anna C. Hall, *An analysis of certain professional occupations in relation to formal education objectives* (Pittusburg, Carnegi Library, 1968).

24 Adam Curle in *Educational strategy for developing societies* (Tavistock publications, 1963. p 69) observed "If, therefore, I were compelled to define underdevelopment, I would do so in terms of failure to make adequate use of human resources."

25 Remember 70% of the Indian people is unlettered, in the past which was even higher, but in terms of this the Indian culture has never been interpreted.

26 For the characteristics of 'Babu-culture', *see* Hayakawa, *op. cit.* p. 239.

27 For the nature of the social knowledge *see* D. A. Kemp, *The nature of knowledge* (Clive Bingley, 1976).

28 A word of caution is necessary here. To serve its educational functions the public library need not take the role of a teacher or a preacher. There is a basic difference between the concepts of teaching and educating. According to Sri Aurobindo "The first principle of True Teaching is that nothing can be taught,—the teacher is not an instructor or a task-master, he is a helper and a guide." The second principle of teaching as enunciated by him "is that the mind has to be consulted in its own growth. The idea of hammering the child into the shape desired by the parent or teacher is a barbarous and ignorant superstition." He further pointed out that "A free and natural growth is the condition of genuine development. . .". However, the statesman, who is accustomed to believe himself as the self-appointed guardian of the people, may not be inclined to give the public library such a free hand, especially where the political order is built on some ideological foundation—say communism, For the educational functions of the public library see ALA *Standards for public library* (1956). Anna-Maria Kylberg observed in "Audio-visual materials and the public library", *Unesco-bul. for lib.* 27, 6; November-December 1973, 326) that "As I see it, the public library's main role, in close collaboration with educational institution, will be to bridge the gap between the present-day educational situation of the individual and demands of the community." Sir Girija Sankar Bajpai (*op. cit.*) reminded the librarians that they "would be doing a national service if (they) could by pertenacity of effort, make this vital connection between libraries and popular education part of the common currency of educational thought. Once the link

becomes patent, the demand for a systematic diffusion of libraries throughout the land will grow until it becomes irrestible." For the role of the public library in promoting adult education *see* Frank W. Jussup, "Libraries and adult education", *Unesco bul. for lib.* 27, 6; November-December 1973, 308-314.

29 Matson. *op. cit.* pp. 39-40.

30 The ultimate purpose of a library, as defined by Weinberg with special reference to university library, is to supply information C. B. Weinberg "the university library : analysis and proposals", *Management sc.*, 21, 1974, 130-140. This may be true, or may not be wholly true. But this can never be the primary purpose of the public library. Currently the idea has been floated that in order to take part in the day to day life of the ptedominantly illiterate rural people public libraries in rural India should be developed as information centres. *See* for example the following papers by S. M. Ganguly, "Literacy drive through information service in public libraries" in S. N. Agarwal *and others ed., Perspectives in library and information science : Viswanathan Festschrift* (Print House, 1982. pp, 84-91); "An objective approach to national policy for libraries", *IASLIC bul.* 24, 4; December 1979, 159-164. For myself, I believe that it will be a death of the public library if public libraries are transformed into information centres. Alvin S. Johnson in *The public library : A people's university* (American Association for Adult Education, 1938) observed that "A democracy can never be a reality if knowladge of the political, social, economic and technological affairs is a monopoly of the privileged and the few" (p. 5). Perhaps the association of the concept of library with education and that of education with knowledge and information, has some contribution towards the development of the concept of the public library as information centre. Catering to the information needs of the community is undeniably an important function of the public library, but never the primary one. It has been rightly put by S. Mohlenbrock that there is a great latent interest in cultural life which it is the duty of the public library to awaken." Quoted by Jessup, *op. cit*, p. 312. We have also been harping on the idea that our village public libraries should be developed in the image of our traditional village community centre—now in decay. Such an institution like the traditional community centres could evolve only through ages of social and cultural process, and can not be imposed by the errand of the state on the life of the people. If the public library in India is to be such an homogenous natural social institution it needs to be developed from the bottom and not to be imposed upon from above. It appears to me as enigmatic how the law based public libraries with the bureaucratic fetters all over its body and soul can grow freely with the life of the people. *See* Mookerjee *op. eii.*, Ray *op. cit.*, and Dasgupta, *op. cit.*

31 Rabindranath Tagore. *Message.* First Baroda State Libraries Conference, 1925. *Ind. lib. jnl.* 1, 4; January 1926, 19.

"With a grand plan in mind
I toil day and night,
Till something large is built at last,
Truth and illusion mixed,
But my tiny hopes wait long,
The joys that are frail,
In the vision of which mingle
Some stray notes of song.
A breath of hidden flowers,
The whisper in the shed of a familiar tree,
And a leisure brimming
Over with dream bubbles.

When God's will to create
Shook the sky into fiery whirls,
His power, in the beginning of years,
Built up its triumph in towering hills,
But his dream waited millions of barren nights
Before He smiled on His first shy flower."

Dated : March 18, 1925.

*These references are due to Benge, *op. cit.*

*Sri Aurobindo. A system of national education (some preliminary ideas) (Arya publishing house, 1948. p. 3, 4, 6.)

STRUCTURE OF THE PROPOSED DRAFT "ORISSA PUBLIC LIBRARIES ACT"

BAMAN PARIDA

1 INTRODUCTION

A vigilant and informed public opinion is the bedrock of democracy and libraries have a crucial role to play in promoting enlightenment and understanding among the people. No democratic system of government can function efficiently if its citizens are not educated. It is, therefore, natural for any democratic system of government to make adequate provision for proper education of its people.[1] Thus, in a democratic country like ours public library plays a dominant role in enabling the citizen to farm his opinion on the social, political and economic problems and a public library is a reliable agency for promoting self-education and also the media of mass communication.[2]

The Preamble and the Directive Principles of our Constitution have laid stress on social justice and equality of status and opportunity to our citizens. So in a welfare state we should not keep our citizens illiterate and ignorant in consequence of lack library service. Today modern public library is an integral part of public education and an essential component of the machinery employed for imparting mass education. It has to play a vital role in adult education making use of new techniques of communication. It can help in building up our country peacefully and democratically and in eradicating deep-routed notions of communalism and casteism. It can also help to eradicate the evil of untouchability rooted in the ignorance of masses. Thus, it is an essential task of both the state as well as the central government to establish, finance and manage public libraries.

2 LIBRARY LEGISLATION

2.1 THE CONCEPT

Today public libraries have become the media of mass communication. They

are essential cultural centres of the society. Their activities are dependent upon the activities of the society in which they function. Since social conditions vary from country to country and from age to age, the role of public libraries also have varied accordingly. In order to finance these social institutions and make them more useful and effective in the service of the community, library legislation is essential. In the absence of any legal provision, public libraries are likely to be neglected. Hence, it is experienced that unless there is library legislation to fix responsibility on the government or on the authorities squarely, public libraries will not get adequate attention from the government or such other authorities.

For a stable, uniform, efficient, growing and coordinated network of libraries throughout the country on statutory basis legislation is necessary; firstly, it can ensure a system in which only public libraries establish a symbiosis between themselves but public libraries as an entity enter into a symbiosis with other types of libraries; secondly, only a legislation can secure an assured developmental base for our public libraries. Also late Dr Ranganathan has pointed out, "if library service is found to be essential for the well-being of the state, it must be provided by legislative enactment."

2.2 Objectives

The aim of library legislation should be to create the necessary library agencies and to define their functions in such a way that the National Library Service may work along the most effective and economical lines. Library legislation guarantees establishment, development and maintenance of libraries. It provides necessary financial support on a suitable and progressive basis. It ensures development of libraries on an approved and uniform pattern. It sets up proper management for the running of libraries. The library authorities are so constituted that they are responsible to public.

2.3 The Need For India

In India we have a rich cultural and literary heritage and in fact we Indians are inheritors of an impressive and eduring civilization. At present according to our Constitution the nature of society that we Indians conceive of, provides social, economic and political opportunities, equally to all. This can be possible only through proper arrangements for the education of our people at different levels. In order to provide education, various kinds of reading materials are needed and to organise such materials libraries are to be established in the most effective and modern way. Thus for the establishment of libraries we need finances and to obtain finance legislation is imperative. Since no philanthropic organisation can bear such huge financial burden for all times to

come, the government should take the responsibility through library legislation. Though, as per our Constitution, education including public library service is a state subject, encouragement and financial assistance should come from central government and as such it concerns central as well as state governments.

Thus, library legislation is responsible for establishing a library authority who is ultimately vested with powers to establish and organise public libraries both in urban and rural areas and to control state library service as a whole. India being wedded to a democratic socialism with its vast and multisided regional, cultural, political, social and economic problems should adopt library legislation at national as well as state levels in order to locate at least one library in every village in the country.

2.4 Progress of Library Legislation in India

The progress made towards the enactment library legislation in India during the last three decades of our independence is very poor. Only five states have so far enacted public libraries act and all other constituent states and the union territories of India have not yet adopted library legislation. So it is rightly observed by Professor J S Sharma that, "Library service, the importance of which has not yet attracted the attention of our legislators in India, in spite of our rich literary heritage, has a great role to play in the implementation of state policies with regard to mass education and emotional integration."

Dr S R Ranganathan, the father of library science in India, had prepared library development plans with draft library bills for many States of India. Also, he had taken keen interest for enactment of public libraries acts of different states of India and especially the South Indian States like Madras, Andhra Pradesh, Maharashtra and Mysore. The West Bengal Government has adopted Public Libraries Act a couple of years back and for enactment of this act, the efforts of Bengal Library Association are worth mentioning. Also many libraries, library associations and eminent educationists of India did make sincere attempts to put before the legislators the need for library legislation. It is learnt that a few state governments are considering the draft bills sympathetically.

PUBLIC LIBRARY SYSTEM IN ORISSA

Orissa is a state of hoary antiquities and magnificent artistic achievements with a rich cultural heritage. But, unfortunately, till now this state is considered to lag behind in public library movement.

A beautiful building constructed for the State Central Library named as 'Gandhi Bhavan' is now being utilised as the office of Director of Public Instruction, Orissa. However a small portion of it is left at the disposal of the State

Library with a collection of about twenty thousand books, an Assistant Librarian as officer of the library and a few assistants. Practically, this library is quite defunct and rendering no service to the public. For the last few years the management of this library has been transfered from Education Department to the Cultural Affairs Department of the Government of Orissa. A few district libraries have been established at the district headquarters with one library assistant and one attendant.

Some town and municipal libraries have been established with the financial assistance from the government and also from the muncipalities or corporations. These libraries cater to the need of a small portion of urban community. About one thousand village libraries were established but many of them are not functioning properly due to paucity of funds. However, the Government of Orissa has appointed an Assistant Director of Libraries under the Directorate of Cultural Affairs to look after the interest of the public libraries in the state.

3.1 Need for Integrated Library System in Orissa

The percentage of literacy in Orissa is lower than that of the country as a whole. The majority of people in this state live below the poverty line while only 42% of the people of India live below poverty line. Hence, library service in Orissa should be developed not only to provide full facilities for literacy campaigns and continuing life-long education but also as a part of an overall State Plan for the social, economic and cultural development of the people. Thus, in a welfare state like ours the ultimate goal should be to establish and organise an integrated, comprehensive and efficient public library system for the purposes of fostering and promoting the spread of knowledge, education and culture; for strengthening the forces of socialism, democracy and rule of law and for establishing a wide network of free public libraries providing to all citizens of Orissa equal opportunity of free access.

3.2 Need for Library Legislation in Orissa

In view of the fact that about ninety per cent of the population of Orissa live in the rural areas, rural reconstruction should be given primary consideration. About eighty per cent of rural populatlon is illiterate. So, the most serious impediment to the progress of Orissa is ignorance and illiteracy of the masses of her people. The condition of Orissa can improve when her people on the whole are literate, intelligent and enlightened. Hence, for the success of developmental plans under a democratic form of government, the electorates of rural areas should be provided with rural library services and to make successful it is essential that the Government of Orissa adopts library legislation, namely "Orissa Public Libraries Act".

4 STRUCTURE OF THE PROPOSED DRAFT BILL

The proposed bill must be drafted in the light of the Model Public Libraries Bill prepared by Late Dr S R Ranganathan and also by the Planning Commission, Government of India. The proposed bill may be called as 'Orissa Public Libraries Act' and the structure of the said bill may be based on the factors of library legislation. Its essential factors like top management, administration, finance and obligation should include the State Library Authority, Local Library Authorities, Department of Library Service, Library Directorate, State Central Library, State Librarian, Local Libraries, State Library Grant, Library Cess, State Library Fund, District Library Funds, State Library Service and Local Library Services. Also some desirable factors of library legislation like organisation, audit and accounts, library personnel, establishment and maintenance of library associations and the rule-making power, must be included in the proposed draft bill.

4.1 Salient Features of the Bill

Preamble :—A bill to provide for the establishment, maintenance and development of public libraries and organisation of a comprehensive urban and rural library service in the State of Orissa.

Be it enacted by the Legislators of Orissa Legislative Assembly in the thirty fifth year of Republic of India as follows :

Chapter–I (Preliminary)

1 Short title, extent and commencement
2 Definitions :— It includes different terminology like : book, committee, council, State Library, Director, State Librarian, Public Library, Local Library, District Library, State, Year, etc

Chapter–II (State Library Authority)

3 State Library Council : its constitution and composition
4 Functions of State Library Council
5 Term of office and allowances to members of the State Library Council
6 Casual vacancies of the State Library Council
7 Meetings of the State Library Council

Chapter III (Department of Libraries)

8 State Library Directorate

9 Director of Libraries
10 Functions of the Director
11 Orissa State Library Service
12 State Central Library
13 State Librarian
14 Functions of the State Librarian

CHAPTER–IV (Local Library Authority)

15 District Library Committee
(Constitution, Composition, Powers & Functions)
16 District Library System :

(*a*) District Central Library
(*b*) Regional/Sub-divisional Library
(*c*) Block Library
(*d*) Panchayat Library
(*e*) Village Library
(*f*) Mobile Library

17 District Librarian
18 Functions of the District Librarian
19 City/Municipality/N. A. C. Library Committee
(Constitution, Composition, Powers & Functions)
20 City/Municipality/N. A. C. Library
21 City/Municipality/N. A. C. Librarian

CHAPTER–V (Finance and Accounts)

22 State Library Fund
23 Contribution of State Government
24 Special Grants by State Government
25 District Library Fund
26 City/Municipality/N. A. C. Library Fund
27 Library Cess
28 Library Accounts

CHAPTER–VI (Reports, Returns and Inspection)

29 Reports and returns
30 Inspection of Libraries
31 Annual Report

(Establishment, Finance, Budget, Building, Book Collection, Statistics, Circulation, Newspapers and periodicals, Stock taking, General and Suggestions)

CHAPTER–VII (Miscellaneous)

32 Powers to makes rules
33 Powers to make By-laws
34 Control of State Libraries Council and Local Library Authorities by the Government of Orissa
35 Power to Remove Difficulties
36 Transfer of certain Libraries
37 Amendment of the Press Registration Act, 1867—in its application to the State of Orissa
38 Periodic Evaluation of State Library Service

4.2 ORISSA STATE LIBRARY COUNCIL

The State Library Council should be small, well-composed and effective and should in no case exceed 17 members. Different types of library authorities, library users, university of and public librarians, important members of the legislative bodies and recognised library associations in Orissa, leading politicians, experts in the field and certain government officials should be given representation in the Council. The Minister, In-Charge of libraries should be the State Library Authority and as such he should be the chairman of the State Library Council. It shall be his statutory duty to establish; equip and administer a State Library System providing comprehensive library service free of charge to all citizens of Orissa and shall also lay down standards of library service. The Director of Libraries should act as the ex-officio secretary of the State Library Council. The Director of the Harijan & Tribal Welfare Department of Orissa should be taken as an ex-officio member of the State Library Council.

4.3 STATE LIBRARY DIRECTORATE

An independent department of libraries may be constituted by the Government of Orissa with a Director of Libraries as its head and with such other officers and personnel as the Government of Orissa thinks fit. The Director of Libraries should ordinarily be a person possessing academic and professional qualifications with adequate administrative experience. His status and pay should be equal to that of any Director in the Department of Education or Sports and Culture and should be a selection post only. The State Library

Directorate must have some important divisions like Administrative, Finance and Accounts and Inspection and Audit, under the direct control of the Director of Libraries in order to enable him to discharge his duties of supervision and guidance more effectively. Also the Director of Libraries should be empowered with the duty of arranging and securing the training of library personnel, recognising library associations within the State of Orissa and preparing and implementing master plan for the library system of the whole state.

4.4 State Central Library

The State Central Library of Orissa should be maintained as a reservoir of books and other documents for the proper functioning of the state library system. In addition to a general library, the State Central Library should have there following important sections :

(i) State bureau of copy right collection.
(ii) State library for the blind.
(iii) State bureau of inter-library loan.
(iv) State bibliographical bureau.
(v) State bureau of technical service.

Thus the main functions of the State Central Library should be as follows :

(*a*) to collect all materials both current and historical including the copy right material published in the state;
(*b*) to be the main source of reference material in the state;
(*c*) to complete and maintain a state union catalogue;
(*d*) to provide bibliographical service to the State Legislature and to the Government departments and to centralize at the state level the cataloguing and classification of books;
(*e*) to make provision for in-service training of librarians and other library personnel;
(*f*) to initiate and promote inter-library cooperation and library planning with the state.

4.5 State Librarian

The officer-in-charge of the State Central Library may be designated as the State Librarian who should possess good academic and professional qualifications with adequate library experience. He should be selected by the Orissa Public Service Commission and appointed by the Government of Orissa with the status of a Joint Director to enable him to assume leadership and deliver the goods.

The State Librarian shall be responsible for the management of the State Central Library. He will advise the Director of Libraries on all technical matters and submit a report on the working of the library. He will supervise, direct and deal with all matters relating to the Press and Registration of Books Act, 1867 and the maintenance and service of the books sent under the said Act. He will be assisted by technical and general staff in running the State Central Library.

4.6 Local Library Authorities

It shall be the duty of the concerned district library authority and city/municipality/N.A.C. library authority to provide library service to the persons residing in the area within its jurisdiction. The library authority shall establish in every city/municipality/N.A.C. a central library and some branch libraries depending on its population as well as in every district a district library and some sub-divisional or regional, block, panchayat and village libraries.

4.7 Library Funds

Library service should be seen as a powerful instrument of socio-economic and socio-cultural development of the state and also as an important service complementary to the formal educational service in Orissa. In order to maintain and develop this service in the state, an assured and continuous provision of adequate funds by the Government of Orissa is necessary. So the state library authority should maintain a fund called, 'The State Library Fund' and make all its payments from this fund. This fund shall comprise of grants made by the state government, grants in which central government may make contributions and gifts.

The local library authorities should maintain funds like 'City Library Fund' and 'District Library Fund' and these funds should be created from the collection of cess and grants sanctioned to it by the state government. In addition to these, contributions, gifts and income from endowments made to the library authority should be credited to these funds.

5 CONCLUSION

Orissa is quite backward so far as literacy is concerned and her people are cursed with illiteracy and poverty to a large extent. The immense efforts initiated for the literacy campaigns by the government would not have a lasting effect unless these are supported by the Public Library Services. A good public library is the hall-mark of a democratic country like ours. The public libraries have an important role to play in evolving a new enlightened social order and

establishing a more advance scientific and technological society in Orissa. The public library service can be managed through the financial assistance of the state government which can only be possible if the Government of Orissa adopts library legislation and thus takes up the responsibility of establishing public libraries. It is, therefore, high time that the Government of Orissa should enact public libraries act for establishing an efficient, comprehensive and integrated library system in the state.

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A DEVELOPING SOCIETY AND ITS LIBRARY NEEDS

A J GANDHI

Books and other reading material make available a substantial part of experience, achievements and wisdom of the past. A good public library attracts people from all walks of life. Developing societies need such libraries for the communication of knowledge. The label 'public' implies that its membership is "free" in all respects. In fact the concept of "public library" is a by-product of the idea of Welfare State.

The purposes of a public library are : (i) Making available the books which foster a full and good life; (ii) Provision of information; and (iii) Enabling a person to develop his social beneficial abilities through books. A public library should encourage healthy reading which contributes to moral and intellectual development. The aim should not be circulation of a large number of books regardless of their worth. Quality of books is more important than quantity. If novels of little literary merit are ignored, the library may lose a sizable clientele, but this loss can be covered up by improving the quality of service. By enlightening the people, a public library can improve the citizenship of a nation but unfortunately the least enlightened make the least use of the public library. It has become a middle class institution used more by the groups which are economically better of than the poor ones.

In a developing society, apart from keeping the reading material in order, the librarian has to establish a fruitful relationship between the readers and the books. Hə has to guide the readers in the optimum use of the available collection, and provide the information the readers need by tapping all possible sources.

People are exposed to many media for education, recreation and entertainment. Majority of them turn to newspapers, magazines, movies, radio and television. Unfortunately, book reading attracts only a few though the books

provide the most specialised and sophisticated medium. A public library provides the cheapest and easiest access to information and so this institution should be developed and maintained not only in the developing societies but throughout the world.

CONTINUING EDUCATION : AS A MEANS FOR PERSONNEL DEVELOPMENT IN PUBLIC LIBRARIES

H N PRASAD

The origin of the public library is as old as human civilization. UNESCO regards public library as a living form of education, culture and information and as an essential agent for the fostering of peace and understanding between people and between nations. According to Dr Ranganathan the functions of a public library are to : (i) help in the life long self-education of all; (ii) furnish uptodate facts and information on all subjects to all; (iii) distribute recorded information without difference in caste and creed; (iv) contribute towards productivity by informing the top mangement about the latest developments in their sphere; (v) preserve the literary remains for the future generation; and (vi) provide all the harmless and elevating use of leisure and work for the continued social well being of the people in general. To achieve these objectives of the public library the librarians have to be of a dynamic nature and well versed with the latest techniques and developments in the profession. The education given at the library science departments is of such a short duration that it can not make them fully professional in the real sense. They have a continuing responsibility to further their education.

A survey of existing manpower in the public libraries revealed the lack of efficiency and expertise in the trained staff. As the public libraries now-a-days provide specialised information service along with the traditional services, the personnel should have specialised knowledge of methodologies forming core of software and hardware techniques and knowledge of scientific management. This can be achieved through the continuing education programme system. The objectives of this concept are to introduce new areas of study to the librarians which have come up recently and to offer the flexibility and choice to the mature librarians who have developed specialisation in their fields.

The programmes should cover all the staff of public libraries. The activities under the continuing education programmes could pertain to :

(i) Conferences, symposiums, seminars, institutes, workshops, refersher courses;
(ii) Advisory service;
(iii) Library development programmes; and
(vi) Publication programme.

The short term courses can be organised in collaboration with teaching staff in the departments of library science in the universities and the experienced librarians from the public libraries. But there is a need for an agency to conduct and coordinate the continuing education activities at national and regional level. This needs a well established public library system in the country. Government should take initiating in establishment of public library system in the country and create an agency to look after the continuing education programme.

PLANNING FOR NATIONAL INFORMATION SYSTEM FOR AGRICULTURAL SCIENCES

D S SHRIMALI

The reason for our low progress in achieving self sufficiency in agricultural production is not so much due to the increase in population as to lack of proper method of approach on the part of research workers on the one hand and ignorance of what exist, how to get what exist, and how to convey what has been achieved on the improved methods of agriculture. The intensified interest in agriculture, research and its effective organization for providing the upto-date information at the quickest moment to the needed are the real solutions to these problems. Research is the basis of all agricultural teaching and progress. A library is also equally important tool as compared to laboratory in carrying out an effective research and on the other side to bring the benefits of the scientific research to the masses particularly to the agriculturist in the rural areas. Rapid and continuous growth in the output of technical literature concerning several disciplines which contribute to agricultural science has created a serious problem.

The objectives of an Agriculture University are to : (i) impart education in different branches of study, particularly, in agriculture, animal science, rural-industry, agricultural engineering, veterinary science, home science and other allied subjects; (ii) advance research in agriculture and other allied sciences; and (iii) undertake extension programmes relating to the aforesaid sciences.

The objectives of an Agricuitural Library & Information Centre are to provide assistance to the members of the faculty and research staff and, through the service of members of library staff as instructional guides, to participate in interpretative functions of teaching, research and extension. With its aim to provide its readers better access to the right type of material at the right moment, three specific items are examined :

(1) *Resources* : Agricultural research workers use the principles developed in the fundamental sciences and also contribute to them. Coverage of the sub-

ject should be as vast as it can be as warranted by the research programmes. The material acquired should be of all types such as general, special and non-printed, e.g. books, periodicals, serials, textbooks, monographs, proceedings, transactions, reports, dissertations, thesis, manuscripts & archives, incunabula, maps, music, datasheets, tabulation sheets, graphs, drawings, blue-prints, charts, pictures, prints, slides, photostats, microfilms, microprints, micro-cards, microlex, motion-pictures, news reels, auditory etc.

(2) *Service*: Should be prompt courteous and efficient and should be provided in every type i.e. general orientation, special and extension.

(3) *Staff*: Sufficient and capable staff should be made available to provide the requisite services. In addition to the availability of resources, the increasing demands for services require scientific management to achieve the desired purpose economically and efficiently.

PUBLIC LIBRARIES AND ADULT EDUCATION

ABDUL MAJID BABA

The Library protects and preserves written records for use when needed. It has become an indispensable agency of the civilised society. The libraries reflect the social, economic, cultural and educational needs. Special libraries have special collections and clientele and as such can't play any role in adult literacy. On the other hand a public library is established by the government for the general public, is supported by public funds and provides equal access to the reading material to all the people. It is a library of the people, for the people, and is maintained for the use of all. The state itself frames rules for the use of the public library. It can play an important role in adult education.

The principle aim of adult education is to educate those adults who had no opportunity to educate themselves in a formal way during their childhood. In the narrow sense adult education means teaching of 3Rs—reading, writing and arithmetic. But now the concept of adult education is taken in wider connotation and is treated as social education. Apart from 3Rs it includes knowledge about fundamental principles of health, methods to improve economic life, consciousness about rights and duties, etc. According to Maulana Abul Kalam Azad, social education implies education for the complete man. Adult literacy is essential for all round development of a country, and to ensure success of various programmes. The 1961 report of the International Conference on Adult Education points out that adult education enables the adults to recognise the problems, the possibilities and the difficulties inherent in the rapid social and technological change.

A public library provides the best education at the lowest possible cost to the adults. Voluntary reading groups should be formed in libraries to read aloud to illiterates. The library can serve as a clearing house for information relating to agricultural problems, health issues, vocational guidence and the like. In fact a dynamic library can provide variety of services. Many coun-

tries have demonstrated that a public library can play an important role in the development of the society.

Library services in Asia are inadequate. Mobile units with base in regional headquarters can reach local communities. The public library staff should be properly trained and services of voluntary workers should be utilised if available. A good public library helps a man to educate himself. It should lead the neo-literate step by step from simple and interesting reading to the advanced informative books, and thus play a great part in the life of the community.

The library should have an easily accessible location, should attract more and more people and stimulate the use of the reading material. With optimum use of resources it should establish links with other educational and welfare services, with an aim to establish effective community services.

SRI PRATAP SINGH CENTRAL PUBLIC LIBRARY : A CASE STUDY

A I H ZAIDI

In 1919, the Jammu & Kashmir Darbar passed a resolution to establish in Srinagar a public library christened as Sri Pratap Singh Public Library, later renamed as Sri Pratap Singh Central Public Library. To this library the books and manuscripts which formed a section of the local museum were transferred. These books which were simply items in store-house turned into vital instruments for education as a life-long process. A voluntary reading room, more as a centre of political activity was also established in 1931. Though formally and legally separated from the museum, the library still occupies the same building. A modern public library building, aesthetically pleasing, structurally operational, professionally confirming to public library standards, is a basic need till todate for the development of this Public Library. However, one of the annual reports states that a site for the construction of the library building has been selected.

As regards the administrative and financial control of the library the state government has not followed a coherent and consistent policy. The composition and working of the Library Advisory Committee is not laid down in detail. The seed of a public library has grown to a full size in the form of the central public libraries, district libraries, tehsil libraries and block libraries. However, how far this extension of library facilities has served some relevant purpose of providing local information needs, is an area for possible future research.

There are indications that in our country the information services are underutilised. Though it is the reader in whose image every library should be designed, in developing countries information services are provided without any recourse to the real needs of the users. Mere mushrooming of information services should be converted into effective, usable and relevant services.

Sri Pratap Singh Public Library has grown in structure and size. Many posts, both professional and non-professional have been created. The creation of posts

not commensurate with the facilities provided. The increase in membership indicates that the public use of the library is going up. Detailed and in-depth studies can be carried out in various areas like feedback from users, obstacles in fuller use, community participation, adult education programmes, etc. Such studies will prove useful in the extension of library services.

STRUCTURAL AND FUNCTIONAL APPROACH TO NATIS

S M SHAFI

The NATIS concept implies that the government should maximize the availability of all relevant information through documentation, library and archives services, The paper is an atttempt to study the application of Structural and Functional Approach (a derivative of systems approach) to NATIS.

1 STRUCTURAL & FUNCTIONAL APPROACH

It is derivative of system approach having the basic premise that every system has developed certain structures in order to perform those essential functions as are vital for its existence. As such this approach revolves round the twin concept of structure and function. It is sometime called Functionalism also. In its present form it is a recent development and stems from writings of anthropologists like Malinowski and Redcliffe Brown, and sociologists like Talcott parsons. Levy, etc.

The off the scene Library and Information Scientists have contributed towards it in confinements of space and time but with advancement in science and technology, new orders of mass communications and other developments brought into play a number of new functions, such as interest articulation, interest Aggregation. etc. As the new functions would, obviously, not be gained by traditional library, the library scientists should have to rediscover Structural Functional approach and it may have a greater relevance to NATIS. I have collected common accepted views from different models develop by social scientists and tried to and evolve a common skeleton model which may suit to every field. However, the main working model for eaeh discipline can be worked out separately after keeping in view specific needs of that discipline. Let us view the basic premises of the theory and try to ascertain its relevance for NATIS.

1.1 University of Structure

When a few interesting roles and aetivitics combine together and form a certain pattern then a structure comes into existence. · Similarly, when a few structures combine together then a sub-system or system emerged. To illustrate, when regional information centres, sectoral information centers and local information centres (various strnctures) combine together then they form a national information sub-system, which in turn is a part of international information system. Every information system supports such structures which classifies indexes and dissemenates information.

1.2 Universality of Functions

Mercon J Levy expiains this term as a condition or state of affairs that results from the operations of the structure through time. But activity should have system relevance. It is observed that every system must perform certain functions in order to keep itself in tact and going. The main point here is that every system should perform certain basic functions but secondary functions may vary from system to system. I have tried to spell out the basic common functions in case of NATIS. These functions may be of input or output nature. What hoids good with regard to structures is also true of the functions.

1.3 Multifunctionality of Structures

By and large all structures perform more than one function. The structures may be diffuse and may perform more than one function mostly in the case of underveloped system but it is also an established pattern in developed systems e.g. a unit sometimes may carry out a function not assigned to it because information system is service oriented in nature.

1.4 Users Character and Environment

The groups of users in a particular system may affect the system and it is their skill and potential that determine their basic orientation towards the system. A group may have cognitive (only aware) orientation, affective orientation (knows but also feels its impact and also capable to comment upon). These orientations to a great extent may add to the development of the system in their typical way.

2 FUNCTIONAL ASPECTS

The system theorists in this approach have not given any blanket sort of

classification ef functions but they have tried to view the functions of the system from three different levels viz, conversion capabilities and pattern maintenance, and adaptation levels. These again support two types of structures viz input and output structures. The input structures are those that induct into the system information disturbances, stress etc, that the environment generates from time to time; whereas the output structures are those structures as transmit system decisions to the environment. These functions are catagorised as (1) Conversion Function; (2) Capability Function; and (3) Pattern Maintenance and Adaptation Function.

The Conversion Function includes : Interest Articulation; Interest Aggregation Administrative/Planning Functions; and Technical Function. In order to protect their respective interests the users of the information system should make demands on it. The manner these demands are given a proper shape and presented to decision makers of the system is described as the process of interest articulation. The demand may be made by an individual, a department, an association or a group of research workers, traders etc. Another important factors in the style of articulation of interest is that it may be manifest or latent. It may also be specific or diffuse. The system has to take care of all this. Quite often demands that are articulated by various groups contradict one another. It is therefore essential that various demands may first be aggregated, i.e. should be co-related and co-ordinated with one another and then formulated in the form of decisions and presented to decision makers. Unless there exist structures for the aggregations of interest, the central decision making apparatus would receive a heavy overload of demands and it might crumble under this pressure. The administrative functions correspond to the objective of establishing legislative function for NATIS and further intricacies have to be worked out. The planning function is related to a administrative function. The function of information system is to provide for effeotive transfer of information and government should establish the appropriate organs for the operation of NATIS and clearly designate responsibilities and determine priorities at all levels.

The technical function covers the processing of data such as procurement, processing and dissementation and involves many techniques which may suit differently to different nations or disciplines.

The Capability Function includes : Extractive Capability; Regulative Capability; Distributive Capability; and Responsive Capability.

Every system is embedded in an environment. How a system manages to overcome stress as generated by environment is a very important question to be examined. It is in this connection we study the capability of the system. There can be many kinds of systems capabilities. The extract capability refers to the system's capability to extract the resources from the Government such as taxes and services for the collective purposes. How effectively and efficiently

and through what modes and procedures the system performs this function are some of the things to be carefully looked in this respect. The capability relates to the system's exercise of control over behaviour of individuals or group users of NATIS. The control here implies that how for they will maintain the National and International standards of querry and its reply in a controlled manner. The distributive capability refers to the allocation of funds, goods, services and opportunities of various kinds from the information system to different individuals/groups/societies of different disciplines, etc. The capabilities already explained are of input nature, whereas, responsive capability maintains a relationship between inputs and outputs. The question here is, to which section of people it is responsive and which category have a little access to it. In our country scientists get a large chunk of share in it, whereas, social scientists and humanities groups are being given a second priority.

The pattern maintenance and adoptation is the function of maintaining the existing pattern of the system by continuously adapting it to the changing environment. This is the sophisticated form of law of consistency observed in Library system but this has an implication for NATIS also. The standards should be such as will meet longer goals and will not ruin in a short time. Therefore we should employ international standards and UNESCO should provide assistance to states for planning and development. The promotion of universal bibliographic control is a land mark in this direction.