The General Information Programme (PGI) and developing countries: a case study of Iraq

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THE GENERAL INFORMATION PROGRAMME (PGI) AND DEVELOPING COUNTRIES: A CASE STUDY OF IRAQ

by

Victoria Yousip Zado, M.Sc., M.Phil

A Doctoral Thesis

Submitted in partial fulfilment of the requirements for the award of Doctor of Philosophy of the Loughborough University of Technology

September, 1990
DEDICATION

I dedicate this work in memory of my beloved parents, Yousip Mirza Zado and Surma Nadir Khoshaba, who did for me what nobody else could.

I do not wish to forget my lovely husband, Matte Lazar Betrus, for bearing with me during the period of my study.
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ACKNOWLEDGEMENTS

My sincere thanks and gratitude to my supervisor, Professor A J Meadows, for his wise and helpful advice when work reached a critical phase, he kindly enabled me to clarify my intentions and re-submit my thesis. I am also very grateful to him for reading and correcting this thesis in a very short and busy time.

I express my thanks, appreciation and respects to:

Professor Paul Sturges, for his valuable guidance and patience.

All staff of the Department of Library and Information Studies, for their co-operation and friendly attitude.

Mrs Irene Martindale, for kindly typing this thesis.
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ABSTRACT

The existing information services in Iraq are inefficient and inadequate. They are contributing very little to the development process in the country. Therefore, they need to be improved and developed. The majority of the developing countries, of which Iraq is one and with which we are especially concerned, are undergoing a development process which, in itself, forms a force that develops demand for information services (libraries, documentation and archives centres).

This study (a) investigates the present situation of information services in Iraq, examines their deficiencies, and considers the possibility of establishing effective guidelines for their development within the conceptual framework of the General Information Programme (PGI) of Unesco, so that they can contribute to the national development plans of the country; (b) explains the vital role of information services in development and the functions of collecting, organising, retrieving and disseminating information at the national, regional and international level; (c) identifies the factors that are hindering the development of information services; (d) identifies the measures and steps that must be taken to bring about a fundamental change in the development of these services in Iraq and that might be useful for other developing countries, especially Arab countries.
INTRODUCTION

It has been recognised nationally and internationally that information is a resource as essential as other resources (i.e. electricity, oil, grains, human skills, etc.). This recognition is evident, for example, through the attention given to the topic at national and international conferences (e.g. inter-governmental conferences of scientific and technological information for development, the International Co-Operative Information Systems, and the United Nations Conference on Science and Technology for Development) where information has been a principal topic for discussion. It is also evident from the attention given by the developed countries to the collection, organisation and utilisation of information. This is witnessed by the establishment and maintenance in these countries of advanced library and information services where sophisticated technology is being applied. However, recognition of information as a resource in most developing countries, of which Iraq is one and with which we are especially concerned here, is still only at a preliminary stage. This initial stage varies from one country to another. The main factors which are hindering the development of library and information services in the developing countries are: the rapid growth of population; high rate of illiteracy, the poor state of the economy, poor book production and publishing industry and the traditional educational system.

The progress and development of any country is measured by the availability, organisation and utilisation of its resources. Information, as one of the resources, therefore needs to be made available, organised and utilised. Most developing countries going through this process of development adopt some form of planning procedure to implement a national development policy. Information services also need to be planned, so that they can reach
their developmental objectives. There must be an adequate and efficient information infrastructure that performs the functions of collecting, organising, retrieving, and disseminating information at national, regional and international levels. The developing countries, including Iraq, need to recognise information as an essential component in society's development, to recognise the deficiencies and inadequacies of their information services at the national level, and to take the measures necessary to bring about a fundamental change in the development of library and information services in each individual country.

The first chapter of this thesis deals with the general background of the library and information services in Iraq. It covers geography, history and government, economic conditions, education, book production and publishing, science and technology and the libraries and information centres and services.

Information for development, educational, political, social and cultural, scientific and technological, and information for international understanding is covered in the second chapter. The need for developing a national framework for information services, sources of information and acquisition policy, staffing, the library education and training programmes for the information workers and the end-users, standardisation, communication facilities, book production and publishing, bibliographic control and the Iraqi library association are discussed in the third chapter.

Chapter Four covers the results and analysis of a comprehensive survey of the position in Iraq carried out in 1989. The theoretical basis for a national general information programme is covered in Chapter Five. Finally, Chapter 6 covers the summary and conclusion and
recommendations drawn up for further studies. On the basis of data collected in a pilot survey, which was carried out in Iraq in 1978, a comprehensive survey was carried out in 1989, covering all aspects of the existing information services in a more detailed way. This examined the information needs of users over a broad sample of the whole scientific community located in a variety of institutions in Iraq. The intention was to discover more about how the information services are working and to formulate objective guidelines for their development within the conceptual framework of the General Information Programme (PGI) of Unesco, as an integral part of national development plans in the country. The aim of the comprehensive survey was to collect data from as many sources as possible. Questionnaires, structured interviews, direct observation, discussion with colleagues (and the candidate's experience in the field) were used. A literature review was carried out to complement the data collected for this study.

THE CURRENT SITUATION

To complement the data collected for this study, a literature review was conducted to find out information about the existing information services in Iraq, past and present, what has been written about them, their role, their development and their contribution to the National Development Plans of the country.

Cultural, scientific and educational institutions have existed in Iraq since the early history of mankind. Libraries existed in ancient Iraq, which was known as Mesopotamia, as early as 4000 BC. The earliest written records of the Summarians, Babylonians and Assyrians were excavated in the form of clay tables from various locations in Iraq (1).
During the Middle Ages, the Arab-Islamic civilisation of the Abbasids flourished. This civilisation had an impact on many countries, especially in Europe. Iraq was never without libraries; they existed in houses, old churches, monasteries and mosques (2). Iraq was under many foreign occupations until it became independent in 1932. These foreign occupations affected the intellectual, cultural, educational, social and economic life of the country. Teaching institutions and libraries were also affected so that they contributed less effectively to the education and progress of the society. The Iraqi government, in the last thirty years, has given high priority to socio-economic and educational development, which has led to the expansion of learning institutions at all levels, and, consequently, to the establishment and spread of libraries and information services.

In Iraq, the modern library movement began in 1921, when the first public library was founded. In 1961, this became the National Library (3). From 1921 onwards, primary and secondary schools expanded and spread in the major cities in the country. Also, institutions of higher education and learned societies started. The information services provided by these libraries were simple, they were traditional and mainly used for reading and lending. They did not contribute to the development and progress of the society in the wider sense of today. In 1933, the first special library was established by the Iraqi Museum in Baghdad (4). In 1958, the existing training colleges were incorporated and the University of Baghdad was established. This means that the first University Library - the Central Library, University of Baghdad - was established in 1958 (5). In 1959, the Central Library of Mosul University, in northern Iraq, in 1968, Sulaimaniya (now Salahaddin) University Central Library, and in 1975, the University of Technology Central Library, were founded. These were followed by, in 1987, the University of Tekrit and, in
1988, Saddam University for Engineering and Science (6).

In the early days of independence, a large part of the national budget was allocated for education. Because of this emphasis on education, libraries received considerable support in Iraq and in many Arab States. Yet, these libraries have not been able to progress at a steady rate because of the persistent lag in modern teaching methods (7).

Al-Dhahir (8) has commented that:

The full use of the library by the students and teaching staff is the most important element that forces the library to do its best to offer good service. Unfortunately, all university libraries in Iraq are not used properly by the teaching staff and students to their fullest capacity ... teaching method tends to put emphasis on the mental ability of the student to memorise the syllabus in order to pass the examination.

Manzoor (9) adds:

Books are usually syllabus oriented with the result the students have developed the habit of 'spoon feeding'.

Such an education system naturally keeps the majority of the students away from the library. Al-Dhahir (10) quotes Gelfant as saying that:

Good teaching supplies the student with the basic motivation to make effective use of the library. Regardless of the method, whether it be lecture, class discussion, laboratory demonstration, tutorial conference, the end result should be students whose minds have been challenged, whose curiosity and critical facilities have been aroused and whose innate desire to learn has been encouraged. Such students will quickly find their way to the library. To them, it will be an intellectual necessity.
However, experience shows that the teaching staff themselves do not use the library. They rely on textbooks and do not give the students reading lists that require using the library. There is therefore an urgent need to revise the whole educational system if the students are to benefit fully from educational experiences (11).

There is no co-ordination between libraries and they are used very little by students at universities. Kindilchie has noted (12):

There is a great need for academic libraries in Iraq to co-operate with each other in different programmes and services, and remarked that staffing levels and library building needed to be reconsidered.

It is clearly necessary to co-ordinate libraries in order to make full use of information resources and services. National bibliographic control is currently ineffective and unsatisfactory. Arabic works have many bibliographic problems: they are inconsistent, unsystematic and not comprehensive (Al-Akhras, 13). This is a basic handicap for any endeavour to encourage development and resource sharing.

School libraries exist, but do not offer the information services which help pupils build up the habit of reading and the ability to find out for themselves the information they need. Pupils know very little about the information services that a library can offer. Ibrahim (14) has observed:

One major objective of the educational system is to equip the students to be able to deal with the conditions of rapid change. The students need to learn to continue to learn after they leave their colleges and universities. We need to teach them new skills, approaches and methods because the rapid change in findings and discoveries make
many facts and materials obsolete and useless. No longer a student can depend on what he learns in classroom, he should be taught to read a variety of materials to expand his knowledge and the limits of his thinking. Therefore, these students need good effective information services to be prepared to learn independently and rely on themselves in finding solutions to the problems facing them in their future life.

It is very important to learn if people have the reading habit and what they like to read, because only then can the information services provide the relevant materials necessary to satisfy their interests. Saunders, quoted by Ibrahim, notes that:

In any developing country, a literacy campaign is incomplete, and will falter, without the back up of an effective public library service to develop and carry on from where the school leaves off (15).

National libraries are vital to continuing education and to research work. They should provide leadership among the nation's libraries and should serve as co-ordinating centres for co-operative activities. Rehman (16) states:

A national library is normally considered responsible for the conservation of national intellectual heritage, national bibliographic control, research and development in the field, and co-ordination and integration among different components of the national information system.

Kalia (17), in his report on the National Library of Iraq, points out that:

Before a plan for inter-library linking the libraries is worked out, the government of Iraq should announce its National Library policy. The policy should define the role of library and information services in the national life of the country and to lay down the guidelines for their future development ... The National Library of
Iraq should perform the following main functions: planning agency, legal depository, book acquisition policy, centralised technical services, bibliographic control, exchange centre, resource sharing, practical training and research in library and information services and readers' services.

Archives are obviously very important sources of information, (especially historical information). They need to be preserved, organised, exploited and made available to users. Unfortunately, the archive records in Iraq are poorly treated and very little used. Perotin (18) conducted a study of the organisation of archives in Iraq. Having examined their current state, he observes:

A close examination reveals that the condition of the archives and manuscripts is not really satisfactory and, above all, that the causes of deterioration are permanent. First of all, the whole surface of most of the papers dating from the end of the last century and the first part of the twentieth century has turned yellow to a greater or lesser extent, and some documents which have been folded by hand break apart the second time they are unfolded. In addition, evidence of others having been attacked by insects (bookworms or termites) may be seen here and there, and a few rare cases of mould are to be observed.

The library/information services development movement in the developing countries has attracted the attention of many international organisations, such as FID, IFLA, UNESCO, UNISIST and UNIDO. These have played an important role in the development of libraries and information services in the developing countries, especially in the Arab countries. There have been two important seminars which have affected the Arab countries by introducing a general national and regional conceptual framework for the development of library and information services. These were: the Regional Seminar on Library Development in
Arabic-speaking States, Beirut, 1959 (19), and the Regional Seminar on Bibliography, Documentation and Exchange of Publications in Arabic-speaking States, Cairo, 1962 (20).

The Beirut Seminar emphasised the necessity of sound planning on a national scale as the essential condition for library development. Also, it was reported in the seminar that libraries in Arabic-speaking countries are rather isolated from a professional point of view. The seminar recommended the establishment of a national system including provision of adequate library services at various levels, and that this system should not be confined to public libraries alone, but should include national, university, special, public and school libraries. The seminar called for the organisation of a Central Library Advisory Board with policy-making and advisory powers in each Arab country.

The Cairo Seminar, in 1962, requested the member states to reconsider existing laws and regulations and to develop specific library legislation in order that the library might take its full share in national, social and economic development.

Other meetings and seminars on the development of library and information services in the Arab world have been organised under the auspices of Unesco, or under its sponsorship. The most important of these were the Meeting of Experts on the National Planning of Documentation and Library Services in Arab Countries, Cairo, 1974 (21). The Meeting of Supervisors of Library and Documentation Schools in Arab Countries, Baghdad, 1976 (22) and the Conference of Ministries of Arab States Responsible for the Application of Science and Technology to Development, on National and Regional Planning for Scientific and Technological Information Systems and Services for Development in the Arab Countries, Rabat, Morocco, 1976 (23).
Many international organisations have been active in continuing education in library and information science, especially in the developing countries. They have spread awareness of the value of continuing education by organising short courses, giving support to the start of continuing education programmes, providing for faculty development, developing educational guidelines, giving funds for students, and organising conferences with continuing education components.

Two organisations that have been particularly active and have had a great impact are Unesco, through its General Information Programme (PGI), and the International Federation for Documentation (FID). PGI activities include library training courses, visiting lecturers and experts, guidelines, faculty development and evaluation of library and information continuing education programmes. IFLA works with other library associations to change the attitude of governments and of librarians themselves to a much higher perception of the value of libraries as essential vehicles for economic and social transformation (24).

The most recent conferences on the establishment of library and information networks in the Arab countries have been the First International Information Conference on the Infrastructure of an Information Society, held in Cairo, Egypt, 13-15 December, 1982 (25) and the First Technical Meeting on Arab Information System Network -ARIS-NET, held in Tunisia, June 8-12, 1987. The theme of the 1987 conference was 'Information for Development in the Arab World' (26).

All these efforts for the development of library and information services in the Arab countries are evidence for, and recognition of, the importance of the information services and their vital role in the National Development
Plans of the individual countries. It is also an essential component of the conceptual framework of the General Information Programme of Unesco as an integral part of the National Development Plans of the country.

This literature review has suggested that the existing information services are in a preliminary stage. They are inefficient, unorganised, unco-ordinated and with no co-operation between them. They contribute very little to the development plans in the country - therefore, they need to be improved and developed.
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CHAPTER ONE

LIBRARY AND INFORMATION SERVICES IN IRAQ

GENERAL BACKGROUND

1.1 INTRODUCTION

Library and information services are closely linked with the economic conditions, with the national goals, with all information generating institutions including research and publishing, and with the whole framework of culture and education of the society in which these services are established. Therefore, it is necessary to understand these factors in order to understand what library and information services have been and are, and to formulate objective guidelines for their development.

As the library and information services are influenced by the economic, political and cultural aspects of the country, the starting point of a sound planning of these services should be a proper understanding of these aspects. At the Meeting of Experts on the National Planning of Library Services in Latin America, Ecuador, 7-14 February, 1966 (1), it was stated that:

The rapid transformation of Latin American society during the past few years has made it imperative to revise traditional ideas of the aims and tasks of libraries ... in these profound transformations of complex demographic, structural, economic, social and cultural factors comes into play, the most important of them being education. It is generally agreed in Latin America today that only through planning can education contribute effectively to the development process; and libraries, as an integral part of education, need to be incorporated in such planning.
Also, at the Expert Meeting on the National Planning of Documentation and Library Services in Arab Countries, Cairo, Egypt, 11-17 February, 1974 (2), it was stated that:

... in the modern world, information has become vital to the human community in all spheres;

the personal, vocational and social development of the individual, no less than the development, achievements and international reputation of nations, depends upon the amount, quality and accessibility of available information;

successful national development can be achieved only if there is international co-operation giving each country access to experience gained in others, and in the international field; that, however, international co-operation can be successful only if the participating nation have adequate national information infrastructures;

the full benefits to be derived from the improved transfer of information can only be obtained if there is an increase in information awareness at all levels;

the task of planning, decision-making and administration are increasingly dependent upon the availability and provision of reliable information;

it is the task of documentation and library information services to collect, organise and disseminate information for the benefit of the community; and

the importance of national planning in all sectors for the optimum use of national resources.

Libraries and information units should be kept tied to education because they are indispensable instruments of education which sustain people's reading habits after they have left school and enable them to educate themselves and so ensure their contribution to national development. The complexities of modern life throughout the world require a quantity and variety of information beyond that ever conceived of in other times.
Governments of almost all developing countries give high priorities to education, agriculture, health and industry but very little to libraries and information services. They often do not recognise the basic need for libraries and information services to support development programmes and to promote the improvement of productivity and of human and economic resources. It is generally the case, even in countries with old civilizations, that most human intercourse is by speech, and the written word is relatively unimportant, except in forms of government bureaucracy. Teaching is regarded as being primarily oral, and the complexity of modern thought in numerous monographs and serials is only regarded as being important in industrialised countries. Primary and secondary education are also conceived as oral, though based on textbooks. Hence, the importance of a network of resources—monographs, periodicals, reports, bibliographical databases, are not always appreciated in the development of industry, commerce, social administration, education or culture. Even when governments of the developing countries recognise this need, they do not always provide the necessary financial support.

Libraries and information have many purposes. They provide opportunities for self-instruction and further education and help to fill the gaps caused by shortage of schools. They are the indispensable workshops for educational programmes of all kinds, supporting scientific and technological research and providing essential sources of reference and information for government, commerce, industry and the community at large. Without them, literacy programmes lose much of their effectiveness, those who have suffered to acquire the art of reading relapse into illiteracy and people are deprived of a valuable means of recreation and life-long education. El-Werdi (3) quotes Tough, who identified six areas of interest, quite unrelated to the academic environment, in which informal
continuing education experiences could profitably occur:

- preparing for an occupation;
- remaining current in one's field by learning specific tasks and problems while on the job;
- learning for home and personal responsibilities;
- improving some broad area of competence as reading or writing skills;
- learning for interest of leisure; and
- exploring a subject out of curiosity.

Libraries and information centres serve as the major centres for disseminating information about the achievements and developments of the country to places of learning throughout the world. If the governments of developing countries of which Iraq is one and with which we are especially concerned, want to make real progress in their countries' development efforts, they should seek a literate society. A literate society has knowledge and know-how that will enable the people to act more effectively in improving productivity and living conditions. People can read instructions, argue, decide and can exercise their civil rights. Therefore, recognition of intellectual accomplishments is important in the national development and libraries as intellectual exchange centres serve the nation by providing the constant flow of information so basic to national and international development. The Experts Meeting on the National Planning of Documentation and Library Services in Arab Countries, Cairo, Egypt, 11-17 February, 1974, (4) emphasises:
... the personal, vocational and social
development of the individual, no less than the
development, achievements and international
reputation of nations, depends upon the amount,
quality and accessibility of available
information.

In the developing countries, the libraries and information
services are providing very little of the above; they need
therefore to be developed in order to reach their
development objectives. To meet this need, there must be
an efficient information infrastructure that performs the
functions of collecting, organising, retrieving and
disseminating information.

Unesco's efforts and recommendations, the help of British
Council; of FID; of IFLA and many other national and
international organisations to developing countries have
been neither fully implemented nor fully utilised. This is
why there should be an emphasis on immediate action, rather
than words, to implement all efforts and recommendations of
expertise offered to developing countries. All these
efforts should bring about a fundamental change in the
development of library and information services so they can
play their role in the national development plans of the
country.

1.2 GEOGRAPHY OF IRAQ

Iraq is situated in the south-west of Asia. It is bounded
on the north by Turkey, on the west by Syria and Jordan, on
the east by Iran (Persia); and on the south by Kuwait and
Saudi Arabia. Because of its geographical position, Iraq
has been a bridge between three continents: Asia, Africa
and Europe, and between the Indian Ocean and the
Mediterranean Sea. The main water resources in Iraq are
the Rivers Tigris and Euphrates. They meet in Shatt Al-
Arab, which ends in the Arabian Gulf in the south. Iraq covers an area of 438,446 square kilometres (5). The population of Iraq totalled 17.05 millions in 1989, of whom one-quarter live in the capital, Baghdad (6). The 1977 Census showed that 19.6% of the total population are illiterate, but according to the Unesco Statistical Yearbook, 1989 (7), the percentage of illiterate is: male, 9.8% and female, 12.5%.

The official language of the country is Arabic, but about 15% of the population speak Kurdish, Assyrian, Armenian or Turkuman. The foreign language most widely used is English. The official religion is Islam, but there are other religions (of which Christianity is the largest).

1.3 HISTORY AND GOVERNMENT

Iraq (ancient Mesopotamia - the land between two rivers) had witnessed the birth of the main early human civilizations during the reigns of the Sumerians, the Akkadians, the Kuteens, the Babylonians, the Kassites and the Assyrians, (which, in turn, gave rise to Egyptian and Greco-Roman civilizations). In fact, each civilization gave rise to the following one. The Sumerians, who lived in the south, achieved urban civilisation with the building of their great cities of Ur, Eridu, Uruk and Nuffar, which started to appear from about 4,000 B.C. Contemporary with the Sumerians were the Akkadians who seized power under the leadership of King Sargon the First, founder of an empire known to history. The Akkadian Empire lasted for two centuries with great achievements in economy, road building and arts. After the end of the Akkadian Empire, a period of rule by the Kuteens was followed by the Babylonians. Their three centuries of rule witnessed a remarkable civilization, especially during the reign of King Hammurabi, whose code of laws is known as the
"Code of Hammurabi".

After the Babylonians, came the Kassites, who seem to have had international relations with the countries of the ancient East. After the Kassites came the Assyrian era. The Assyrians made a strong impact on the later history of Iraq by their military conquests and war-like empire. The Assyrian civilisation reached a high level in both intellectual and material aspects. This can be witnessed in the development of the great library of Ashurbanipal, which was a centre for preserving and disseminating ancient learning. In 612 B.C., the Chaldeans brought the Assyrian rule to an end. Then the Persians seized the area. In 637 A.D., the Arabs liberated Iraq from the Persians. The Arab civilisation was subsequently distinguished for its achievements in science, culture, trade and military and political power.

In 1,258 A.D., Iraq fell to the armies of Hulaghu and the Mongols. Their invasion brought about huge destruction and loss. Libraries as well as other learned institutions were either burned, or their contents were thrown into the river.

In the seventeenth century, the Arab region came under the rule of the Ottoman Empire until the First World War, when the Allies put an end to it. The British occupied Iraq in 1917; and at the San Remo Conference, in 1920, Iraq was placed under a British mandate, and the British military rule was terminated. An Arab Council of State, advised by the British officials, and responsible for the administration, came into being. In 1921, Iraq became a Kingdom, and, in 1932, it became an independent state, joining the League of Nations (now the United Nations).

On 14 July, 1958, the Iraqi monarchy was overthrown and a Republic was established. The 1958 Revolution initiated a
programme for industrialisation. On 8 February, 1963, the Arab Baath Socialist Party led an armed popular uprising which put an end to the Kassim regime. The unstable political situation that Iraq had undergone, had had great negative impact on the country's national development in all its aspects.

With respect to government, the highest authority in the country now rests with the Revolutionary Command Council consisting of nine members, and identical with the Iraq Regional Command of the Baath Socialist Party. The day-to-day running of the country is carried out by the Council of Ministers. There is also a 250-member National Assembly existing for four years at a time, and a 50-member Kurdish Legislative Council with three-year sessions for the Kurdish Autonomous Region (8). Iraq is administratively divided into eighteen provinces.

1.4 ECONOMIC CONDITIONS

Agriculture was the main support of the Iraqi economy until oil production began on a large scale, it is still considered as one of the most important aspects of the economy in Iraq. Agriculture accounts for 14% of the national income and employs about half of the country's labour force (9). The government put great efforts in the attempt to raise productivity, and so to maintain agricultural self-sufficiency, as stated in the 1976-80 five-year plan (10). Because of the continued investment and Iraq's plentiful supply of irrigation water and fertile land, agriculture in Iraq is among the most developed in the region.

With respect to industry, Iraq has been seeking to strengthen its economy by developing its industrial sector.
Until the late 1960s, there were few industries apart from oil production. The government concentrated on electricity, water supply, and the building materials industry. Also, there were industries concerned with textile, food, furniture, jewellery, leather products, and various metal manufactures. Now the government has given a high priority to industrialisation in its national development plans. This attention stems from the realisation on the part of the political leadership and economists in Iraq that concentrating on a limited range of primary exports, mainly oil, creates the risk that the market for them may have limited prospects. Also, oil is a diminishing resource, therefore, the country should diversify its resources of revenue from different industrial exports, e.g. textiles, fertilisers, cement, drugs, petro-chemicals, leather products, etc. The 1976-80 five-year plan ensured Iraq's entry into the domain of heavy industry. Numerous industrial plants have been established with many others under construction, e.g.

- Petrochemical plan at Basrah in the south
- Phosphate fertiliser plant at Mishraq-Neneveh - north
- Textile plant at Hindiya-Babylon - midland
- Cement plant at Haman-Al-Alil-Neneveh, north
- Electronic factory in Baghdad - midland
- Tractor assembly at Iskandariya, Babylon - midland
- Drug factory at Sammaraa - north
- Glass factory at Al-Ramadi - midland
- Brick factory at Al-Hamra - south
Oil is, however, the most important element of Iraq's economy. Iraq is an oil-rich country; it is the third largest country in OPEC as regards oil reserves and the world's second crude oil supplier after Saudi Arabia. Iraqi oil production rose from 2.21 million barrels a day in 1977 to 2.6 million in 1979, while the revenues rose from 9,500 million US dollars to 21,200 million over the same period.

1.5 EDUCATION

Education in Iraq is as old as its civilisation since the first school was established by Hammurabi, but the real beginning of a modern educational system in Iraq was when Iraq came under the British Mandate in 1920-32. During this period, primary schools began to expand and secondary schools for boys were opened in major Iraqi cities.

Higher education started when the College of Law was established in 1918. The Higher Teachers Training College was established in 1923, the College of Medicine in 1927, the College of Pharmacy in 1936, and so on, until 1958, when Baghdad University was established by incorporating the existing colleges of the time. These were followed by the universities: Mosul (1959); Mustansiriya (1963); Basrah (1967); Sulaimaniya (1968) (now Salahaddin); University of Technology, 1975; Tekrit, (1987); and Saddam University for Engineering and Science (1988).

During the period 1974-76, major decisions were promulgated
which constituted a landmark in the history of education in Iraq. The first was the decision of the Revolutionary Command Council announcing free education for all at all levels. The second was the nationalisation of private educational institutions and their transfer to the state. The third was the Law No. 118, 1976, announcing compulsory education for all children who were six years old at the beginning of the academic year. The large expansion in education during recent years is reflected in the rapid growth in numbers of students, educational institutions, teaching staff and expenditure on education, Al-Dhahir (11) states:

The education budget has risen from 78 million Dinar (£156 million) in the 1970-75 five-year plan to 726 million in the 1976-80 plan.

Another indication of the spread of education in Iraq recently is the fall in the number of illiterate people. According to Unesco (12), in 1965, 75.8% of the Iraqi population were illiterate whilst, in 1977, only 19.6% were illiterate. To eradicate illiteracy among this 19.6% of the Iraqi population (citizens of 15-45 years of age), a national comprehensive illiteracy campaign was launched on 1 December, 1978. The campaign aimed at enabling this number of illiterate people to read and write within a period of three years.

The Ministry of Education is responsible for pre-primary, primary, secondary and vocational education besides teacher training schools. The Ministry of Higher Education is responsible for universities and technical institutes. Although education in Iraq has substantially expanded and improved, the educational process still depends on the textbooks method of teaching. This has isolated the library from playing its role in the educational process and has eventually hampered its development. For details
on the education system, see Chapter Two: 2.2 Information for Educational Development.

1.6 BOOK PRODUCTION AND PUBLISHING

Book development and library development go hand-in-hand. Publishers feed the libraries/information centres and they, in turn, provide the book industry with a firm economic base.

Despite the long history of writing and paper manufacturing in Iraq, the present publishing industry is limited and inefficient. It was stated at the Meeting of Experts on the National Planning of Documentation and Library Services in Arab Countries, 1974 (13) that:

... the weak points in the book production in the Arab world lie in its irregularity, imbalance and inadequacy.

In all Arab countries, the annual output of book production in 1980 has been estimated at 7,000 titles, representing 1.0% of the annual world production. This means that the annual output of these countries comes to about 43 titles for every million inhabitants compared with a world rate of 164, and as much as 500 for developed countries (14). The figures in the following tables for the production of textbooks and children's books in the whole Arab world seem encouraging, but yet insufficient.
### TABLE 1
AVAILABLE DATA FOR TEN YEARS IN TERMS OF NUMBER OF TITLES (15):

<table>
<thead>
<tr>
<th>Country</th>
<th>1970</th>
<th>1978</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>289</td>
<td>-</td>
</tr>
<tr>
<td>Egypt</td>
<td>1,872</td>
<td>1,472</td>
</tr>
<tr>
<td>Iraq</td>
<td>515</td>
<td>1,618</td>
</tr>
<tr>
<td>Jordan</td>
<td>114</td>
<td>392</td>
</tr>
<tr>
<td>Kuwait</td>
<td>104</td>
<td>50</td>
</tr>
<tr>
<td>Lebanon</td>
<td>594</td>
<td>-</td>
</tr>
<tr>
<td>Morocco</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Qatar</td>
<td>99</td>
<td>159</td>
</tr>
<tr>
<td>Sudan</td>
<td>-</td>
<td>104</td>
</tr>
<tr>
<td>Syria</td>
<td>-</td>
<td>230</td>
</tr>
<tr>
<td>Tunisia</td>
<td>134</td>
<td>85</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>-</td>
<td>15</td>
</tr>
</tbody>
</table>

One bright point is evidenced by the following table which gives the known data for textbooks and children's books:

### TABLE 2:
TEXTBOOKS: CHILDREN'S BOOKS

<table>
<thead>
<tr>
<th>Country</th>
<th>Textbooks Copies</th>
<th>Year</th>
<th>Children's Books Copies</th>
<th>Year</th>
<th>Egypt Copies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>-</td>
<td>-</td>
<td>455</td>
<td>1977</td>
<td>1977</td>
</tr>
<tr>
<td>Egypt</td>
<td>23,350,000</td>
<td>55</td>
<td>4,001,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Iraq</td>
<td>140</td>
<td>1978</td>
<td>26</td>
<td>1978</td>
<td>-</td>
</tr>
<tr>
<td>Jordan</td>
<td>1</td>
<td>1977</td>
<td>3,175,000</td>
<td>49</td>
<td>1976 833,000</td>
</tr>
<tr>
<td>Kuwait</td>
<td>-</td>
<td>1977</td>
<td>173,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Qatar</td>
<td>111</td>
<td>1978</td>
<td>232,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sudan</td>
<td>88</td>
<td>1977</td>
<td>10,386,000</td>
<td>15</td>
<td>1977 150,000</td>
</tr>
<tr>
<td>Syria</td>
<td>1</td>
<td>1978</td>
<td>2,000</td>
<td>11</td>
<td>1976 38,000</td>
</tr>
<tr>
<td>Tunisia</td>
<td>69</td>
<td>1978</td>
<td>2,651,000</td>
<td>10</td>
<td>1977 93,000</td>
</tr>
</tbody>
</table>

Iraqi books are distributed in both the state and private sectors, but all the material is checked by government authorities before it is published. This is another handicap for the publishing industry. The Ministry of
Culture and Arts is responsible for the production of general books. The Iraqi Scientific Academy publishes books in foreign languages, and the universities publish textbooks.

There are no permanent book fairs, but Iraq participates in international book exhibitions whenever there is an opportunity.

The National House for Publishing, Distributing and Advertising is responsible for importing and exporting foreign and Iraqi books. Iraqi books are reviewed on television and radio weekly and monthly and sometimes in the newspapers. Only the books that the authorities approve are reviewed.

There is no special tax on books. Iraq has participated in the international agreement, passed under the auspices of Unesco, in order to exempt printed matter from all customs duties.

Children's libraries are neglected in Iraq, and so, in general, is children's literature. There are only two children's libraries in the whole country. They are situated in the capital, Baghdad. There is a weekly magazine for children, called Majalati, and another for youth, called Al-Mezmar. A series of popular children's books is also published. A good number of children's books and magazines is imported from Arab and foreign countries.

In 1979, the International Year of the Child was inaugurated. This year gave rise to a wide variety of activities and programmes for the promotion of children's books. Abul Hasan (16) states that:

"Book publishing and reading habits are so closely inter-related that any improvement in one is
bound to have an immediate beneficial effect on the other. That is why one of the four themes identified for the promotion of books during International Book Year and in the long-term programme of action for book development was the promotion of the reading habit. Enduring reading habits are formed at a young age when the mind is most impressionable. For this reason and also because the number capable of reading is always far greater among young people, books for children are considered to be the most important category of books after textbooks. A good juvenile publication - of fiction or fantasy, of fact or formulae - that really catches the child's interest and leads him on to voluntary reading can be one of the least expensive and most effective tools of learning and a very simple means of socialising the child and developing his personality. In order to be attractive and interesting, children's books must be available in the child's mother tongue and based on his actual needs and experience. There is an acute shortage of such literature in developing countries.

1.7 SCIENCE AND TECHNOLOGY

Today, the major concern of the Iraqi government is the development of new policies for science, higher education and technology, which are required to strengthen the country. Large sums are allocated to develop these vital areas. Graduate students are sent abroad on scholarships to ensure the production of specialists needed by the country. Government policy encourages national development and independency in these areas, Tell (17) mentions:

When the government of a developing country wants to improve the economy, raise the educational level, increase agricultural production, improve the health services, establish industries, and many other items which are given priority attention, it is essential that the government uses the information at its disposal for the betterment of the community.
Scientific research is traditionally carried out in industrialised countries at universities, which have always been the natural environment of research, and in research institutes. But, in Iraq, universities have traditionally been centres of teaching. University teaching staff have had no opportunity to do research work, simply because nearly all their time is devoted to teaching. This does not mean that there is no research is conducted in the universities; on the contrary, some research is conducted by postgraduate students and by university professors. The main objective of these research projects is to identify the problems facing different governmental and private organisations, to analyse these problems, and to find solutions for them. The aim of the Council for Scientific Research in its Law No. 172, 1980, includes the advancement of scientific research in all fields and sectors - in particular, that which is concerned with the development of the country's wealth and resources - and the adaptation of the applications of science and technology in a way that can effectively contribute to the country's own development.

The research activities in Iraq seem to be inadequate for a number of reasons. As far as we are concerned in this study, one of these reasons is that researchers, especially scientific and technological research workers, lack effective means of communication and access to up-to-date publications, both to know about work being done in other parts of the country and to learn about methods and research work done in other countries. This is a result of the fact that library and information services in Iraq are inadequate and are not meeting the needs of researchers.

The rapid development of research and development activities in research institutions and industries in Iraq during the last thirty years, or so, has created a rapidly growing need for the establishment of a national
information system to meet the information needs of the research workers who are spread out in various parts of the country, such an information system would need to be flexible, adaptive, and easy to change.

Libraries and information centres are a necessary investment in the overall education, research, social and economic development programmes of a country. They have an important role to play in balanced, integrated social and economic development. Their aim is to provide information services to all people and at all levels, as Havard-Williams (18) states that:

the essential object of the information infrastructure is to exploit the materials of communication for the benefit of the community. To have a healthy and well-balanced society in the conditions of contemporary technological civilisation, provision needs to be made at all levels - for the technologist and the scientist, for the peasant to get the benefit of the most modern improvements in agricultural production, for the student in the college and university, for the manager in his decision-making, for the blind and the deaf, the handicapped, the prisoner, and the hospital patients.

Another information problem is information technology. There are many applications of computers in information systems and also of telecommunications for online systems. But in many developing countries, because of the lack of well-trained information specialists, there is constant frustration with the adapting of suitable software packages, not realising that modern technology gives information centres a chance to play a different institutional role.

At present, in almost all Arab countries (unlike most countries of the Third World), finance is not a major problem, but this situation will not remain as it is forever, because these countries depend on oil revenue
which which not last forever. Therefore, Arab countries, as the rest of the Third World, wish to build an indigenous infrastructure to form the basis on which they can construct their development plans.

Automation plays a key role in the development of library and information infrastructures. The automation situation in Iraq and Arab world indicates that there have been noticeable developments. For example, Kuwait, Saudi Arabia, Morocco, Algeria and Tunisia have access to online literature searching services. Most of these countries have introduced the information technology on the advice and with the assistance of Unisist and Unesco.

Another crucial problem is language. The official language in Iraq and all Arab States is Arabic. English is taught as a second language. In some colleges of the universities, French and German are taught. There are language problems in using computers with machine-readable databases. The Arabic language has a different, more complex alphabet, and it is written from right to left. There, are three choices: either train good personnel, to create technical know-how; or teach them the different languages by sending them abroad, or import the technology with trained staff to operate it. Language problems also exist in offering translation services, in acquisition and classification of materials and in abstracting and indexing services.

1.8 LIBRARIES/INFORMATION CENTRES AND SERVICES

The civilisation that originally flourished in Iraq encountered the need for a centre to keep recorded knowledge for future use. Thus, the idea of libraries was initiated. The ancient Summarians, Babylonians, and Assyrians wanted to record and preserve their history,
heritage and culture. Clay tables and cuneiform writing went hand-in-hand until they were replaced by papyrus (19).

During the Abbasids' rule, education flourished in Iraq and Baghdad became a centre for intellectual activities. Libraries were open to the public and scholars, whatever their purposes might be. Libraries during Abbasids' period can be classified into the following types:

a. Mosque libraries
b. The Caliph's and Official's libraries
c. School libraries
d. Public libraries
e. Private libraries
f. Academic and research libraries
g. The library of Sabur Ibn Ardashir
h. Al-Mustansiriya school library

After this civilization, which lasted for more than six centuries, libraries in Iraq, as well as in most of the Islamic world, began to decline as a result of the Mongols and Hulagu invasions. During the Ottoman rule, the only libraries were basically mosque libraries, which were mainly assigned as storehouses, and rarely used (20).

The modern libraries movement started after the establishment of the Iraqi government in 1921, which worked to activate the library movement, and thus libraries started to appear again gradually as described in the following sections:

1.8.1 The National Library

The National Library was established in 1920 as a public library. In 1961, it was granted its legal status as a
depository library according to the Deposit Law, 1970. It became the legal depository for all Iraqi publications. In 1976, it moved to its new and modern building in Baghdad.

The functions of the National Library in Iraq are: to preserve the Iraqi and Arab heritage; to issue the Iraqi National Bibliography; to organise and participate in national and international book fairs, book exhibitions; to hold library seminars, and to exchange publications with libraries inside and outside the country. The collections of the library, as of last year, amount to 197,063 volumes of books, 2,618 periodical titles, and 4,412 rare books. The collections are classified according to the Dewey Decimal Classification with some modifications for Islamic religion and Arabic literature, language and history.

The National Library is under-staffed and is suffering from a shortage of qualified staff. The National Library is ultimately expected to provide leadership among the nation's libraries and should serve as a co-ordinating centre for co-operative activities. It has achieved considerable developments since moving to its new building.

The National Library is under the Ministry of Culture and Information. It is trying to become independent, so that it will have more financial allocations for purchasing materials, employ more qualified staff, and introduce information technology in order to offer better library and information services to attract more users, thus playing its role in the development process in the country. This might help the National Library to function in the real sense as a national library.

1.8.2 Academic Libraries

Academic libraries are the libraries of the institutions of higher education (e.g. universities, colleges and technical institutes). An academic library plays a significant role
in promoting the educational function of the institution of which it is an integral part. It is said that a university will be as good as its library.

In Iraq, the first academic libraries were established in the 1920s, at the same time as college study began (21). The first college libraries were those of the Higher Teachers Training College, the College of Medicine and the College of Law, which were established in 1927. These were followed by the establishment of other colleges and their libraries. In 1958, the Central Library at Baghdad University was established by incorporating the existing college libraries of the time. Now it acts as a national and UN depository library and the Exchange and National Bibliographic Centre. Its collection consists of 210,000 volumes, 1,950 current periodical titles, 10,190 maps and 1,420 Arabic manuscripts on microfilm, with indexes issued on various subjects. In 1959, the Central Library, University of Mosul, was founded. Its collection contains 147,903 volumes and 1,165 periodical titles; it is a depository of UN and Iraqi government publications. In 1963, the Central Library, Mustansiriya University, was established. It has 114,000 volumes, 300 rolls of microfilms, 1,000 current periodicals titles; also five college libraries are attached to it with 25,000 volumes and 700 periodical titles. In 1967, the Central Library, University of Basrah, was founded. It has 180,000 volumes, 700 manuscripts and 1,400 current periodical titles. In 1968, the Central Library, Salahaddin University, was established. It has 118,000 volumes and 530 current periodical titles. These were followed by: the Central library, University of Technology, in 1975; the Central library, University of Tekrit, in 1987; and the Central library, Saddam University of Engineering and Science on 1988. There are eighteen technical institutes under the Foundation for Technical Institutes, founded in 1972. Each of these institutes has its own library, staff and
holdings. They differ in size and in the amount of the information services offered to their users.

The academic libraries are far better than any other type of library because of the attention and support of university authorities. But, in reality, the average university library does not function efficiently, because its programme is not determined by the educational programme of the university. Most of these libraries are under-staffed, poorly managed and contribute very little to the education of the student. Perhaps this is because of the nature of the educational system which is based on the 'chalk and talk' method of teaching, and memorising the textbooks. On the other hand, the information services provided by these libraries are inadequate because of the lack of qualified professional staff. Information services, current awareness, user education and open access are not practised. There is no co-operation and co-ordination among academic libraries; therefore, there is often useless duplication of materials and insufficient coverage of major fields of learning, leading to waste of money, time and effort.

1.8.3 School Libraries

The school library is essential to the work of the school across the full range of subjects, ages and abilities. A well-organised and well-used school library makes the most of resources and contributes to the educational effectiveness of the school.

In Iraq, school libraries were established in 1921, when the first primary and secondary schools were started. School libraries are not, as yet, an integral part of the educational programme of schools. The running of school libraries has not been based on a defined policy. These
libraries are not involved in curriculum development, and they are not aware of what pupils are being taught. It is just a tradition that a school has a collection of books for reading. In 1974, the School Library Act No. 54 was issued, which required the establishment of a library in every school in the country. Now there are about 9,000 school libraries. These school libraries are under the Ministry of Education, Directorate of School Libraries. The Ministry of Education has issued a number of regulations about the organisation and maintenance of school libraries. These regulations emphasise the fact that the library must provide adequate materials to support and enrich the school programme. Unfortunately, very few of these regulations have been put into practice, mainly because the library staff are unqualified to do that and teachers and pupils are textbook-bound. The year 1983 was announced to be the 'School Library Year' in which libraries will prevail in all schools in Iraq.

The acute inefficiency and problems of library services in Iraq are found in the school libraries. This is evident in many aspects, such as physical facilities, collection, staff, services performed, organisation and administration, funding and library use. Almost all school libraries are run by the teachers in return for being relieved of some of their teaching hours. The school library is typically accommodated in a room designed as a classroom, or in a hall. The holdings are held on closed shelves. They are purchased centrally by the Ministry of Education, or the General Directorate, and they rarely have any relevance to the school educational programme, or to the pupils' mental ability. The school libraries are poorly used, because of the lack of a reading habit, because the educational system does not encourage any independent study and because of the poor library service. Therefore, there is an urgent need to change the philosophy of education and also teaching methodology, through the whole system, from primary school.
to university level.

1.8.4 The Special Libraries

Special libraries have been established by a few learned societies (e.g. the Lawyers' Library) and by a few individuals who have collected a great deal of valuable material in their field of special interest. One example of such an individual is Gewargees Awad, who was a scholar, author and a librarian by training. In the late 1960s, he donated his collection to the Al-Hikma University Library in Baghdad. The first special library was established by the Iraqi Museum in Baghdad in 1933.

Special libraries, with a few exceptions, are not carrying out their role in providing sufficient services to the organisations they serve, and they are not contributing to the economic and industrial development of the country. Their services do not differ from that of any other type of library. The subject coverage in the collections of these libraries is insufficient. This is because of lack of qualified staff, limited budgets (in most cases, the budget of these libraries is within that of the parent organisation) and lack of selection skills on the part of the library staff. The majority of these libraries are staffed by one or two untrained librarians. The shortage of staff has reduced the potentiality and effectiveness of the library collection and resulted in the provision of very traditional library services. Special libraries in Iraq are mainly found in Ministry headquarters, large governmental departments, industrial and commercial enterprises, learned societies, research and development agencies, museums and professional associations. A few of these libraries are good special libraries and are much better off in many aspects, e.g. the Iraqi Medical Society library, Society of Iraqi Artists library, State
1.8.5 Public Libraries

Public libraries used to be administered via instructions issued by the Ministry of Education. It so remained until the issue in 1960 of the Public Library Act, No. 4, which is considered the first major legislation in the history of the library movement in Iraq (22). Public library services in Iraq suffer from a shortage of qualified staff, insufficient funding, inadequacy of premises and other physical facilities and poor collections.

The poor quality and organisation of collections, the closed access, internal lending and surety requirements imposed on external lending all result in poor services. There is no acquisition and purchasing policy. The needs of the society they serve are not met. Also, public library services are not co-ordinated; each library does what it can in accordance with the resources available and without any information about what the other libraries are doing. The inadequacy of the public library has prevented it from playing its role as a living force for education, culture, and information. Professor Havard-Williams (23) describes a public library as:

"a living for education, culture and information - readily accessible to all members of the community, offering to adults and children the communication of information and ideas, whatever the form in which they may be expressed."

There are now more than 180 public libraries in the whole country. Two modern children's public libraries have been established in Baghdad. One, on the east bank of the Tigris River, was founded in 1964; another, on the West bank, was founded in 1985. They offer various activities
that are attractive and useful to children aged 5 to 14 such as showing educational and recreational films, providing educational games and story-telling, as well as making available books and periodicals for children and young people. Only two children's libraries in the whole country is obviously inadequate. The reading habit starts at childhood, therefore, the children literature is the most important one. Librarians agree that the government of Iraq should pay serious attention to this problem by increasing the number of children's libraries in all parts of the country and providing children's literature by assisting publishers and book promoters.

1.8.6 The Iraqi Scientific Documentation Centre (SDC)

The Iraqi Scientific Documentation Centre (SDC) was established in 1971 within the Foundation of Scientific Research (now the Council for Scientific Research). For the first four years of its establishment, the functions and objectives of SDC were without any legislative framework. There were many changes and amendments in the way it worked until 1981, when the SDC Act was issued, and defined its structure, administration and functions. The functions of the SDC are:

1. to collect, analyse and store scientific information of local, Arab and international sources, and make this information easily retrieved for the benefit of scientists and researchers.

2. to offer bibliographical and current awareness services on scientific information available in the SDC or elsewhere inside and outside the country.

3. to organise the publication and distribution of
scientific production of the Council of Scientific Research.

4. to publicise the findings of research and studies conducted in the CSR among the government organisations having subject specialisation similar, or related to, that dealt with by the SDC.

5. to encourage the national movement of scientific research by ensuring the availability of, and access to, scientific information.

6. to offer a technical consultation service to government organisations.

7. to establish co-operation and relation with similar centres abroad.

8. to organise and participate in national and international meetings.

9. to publish technical reports, journals and bulletins.

10. to organise training courses for the SDC staff.

The structure and defined functions of SDC give an impression that this centre contributes to the research movement in the country. In practice, it contributes very little. The shortage of qualified staff allows it to perform only a few of its defined functions. The lack of direct telephone lines has stopped the SDC from linking to international databases, and thus prevented researchers from access to a great amount of information which may be of value for their work. The information services provided are inadequate and do not attract researchers to come and use them. There is a printing press, an audio-visual
laboratory, micro-film, micro-fische, readers/printers, but they are very rarely used.

The location of the SDC is another obstacle, because it is in an area far from the universities, colleges, government and non-government agencies involved in research. The computers section is not operational due to a lack of qualified staff. In order to be able to provide efficient information services and contribute to the research movement and development plans in the country, the SDC needs to acquire more qualified staff and develop the existing ones; more communication facilities, e.g. telephones, telexes; more information technology and other equipment; more foreign expertise. It is a potential centre for providing training programmes for the local librarians and for the users, establishing links and cooperation with the documentation centres outside the country and for organising and participating in seminars, meetings, conferences on national, regional and international levels.

1.8.7 The Iraqi National Centre of Archives (NCA)

The Iraqi National Centre of Archives (NCA) was established in 1964, and was linked to Baghdad University for five years. In 1969, the NCA was transferred to the Ministry of Culture and Information. In 1972, Iraq became a member of the International Council on Archives (ICA). The NCA is the depository of the official records of ministers, courts, government organisations. It has some old records from the Ottoman and British administration rule in Iraq. Also, it preserves selected documents presented by individuals, and which are of benefit to the nation and relevant to the history of Iraq. The library of NCA contains books and references relating to Iraqi and Arab modern history. It is poorly used at present, and the
service of the library is confined to internal lending and references. The shortage of staff available has reduced the functions of the NCA to that of a storehouse of a collection of documents. There are other factors which handicap the NCA. These include: lack of co-operation between government offices and the NCA; lack of awareness of the role of archives; inefficiency of record-keeping in the government offices; inadequacy of accommodation and equipment; lack of a proper legislative framework in which to operate.

1.9 SUMMARY AND CONCLUSION

The library and information services are created by the society within which they operate and thus they reflect that environment in their aims and functions. Therefore, to form a true background for understanding the nature of these services, it is necessary that we understand the environment in which they operate. An attempt has been made in this chapter to give a general background outlining the major relevant features of Iraq: area, population, history, economy, education, book production and publishing, science and technology, library and information centres and services.

Since 1258, Iraq has undergone many different foreign occupations until it became independent in 1932. These occupations have deeply affected the cultural, educational, social and economic situation of the country. Institutions of learning, including libraries have also been affected. In recent years, a high priority has been given to socio-economic and educational development. This has resulted in rapid expansion of educational institutions at all levels and, consequently, in the establishment and spread of libraries. The general conclusion is that developing countries of which Iraq is one, have been going through a
transformation process. This process in itself forms a force that develops demands for library and information services. Unfortunately, the library and information services in Iraq remain poor. They are still inefficient and inadequate, and need to be improved and developed.
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CHAPTER TWO

INFORMATION FOR DEVELOPMENT

2.1 INTRODUCTION

This chapter aims to give the reader an idea of the importance of information and information infrastructures to development. Information has become an indispensable parameter of development and progress of any community, therefore, in Iraq, we have to convince the decision-makers and the society at large of the role information can play in the national development and the necessity of adequate and efficient library and information services. If the government - the development planners, the decision-makers - and the people are not aware and not convinced of the vital role of information in the development plans, or as an integral part of the development process of the country, the problem of information will remain unchanged for many years to come.

Information plays a crucial role in modern society. Khosla (1) states:

... sectorial activities such as industry, agriculture, transportation, and rural development require accurate and timely information for the achievement of their goals. Other activities such as those aimed at technical innovation (research and development), education, or government (planning and decision-making) cannot be carried out without relevant information.

No nation, however rich and determined, can seek all the requisite solutions to the complex scientific,
technological and social problems that are rapidly emerging and multiplying today. A global co-operative effort is the only logical response to the issues challenging humanity. It is for this reason that nations seek to share knowledge and experience pertaining to their common problems and their common goals. Effective co-operation on international, regional, as well as national levels for development is based on information. The role of information in development was emphasised in the Seventh Special Session of the UN General Assembly by the unanimous adoption of resolution 3362 (S/VII):

Developed and developing countries should co-operate in the establishment, strengthening and development of the scientific and technological infrastructures of developing countries.

The importance of information to development has been increasingly recognised by those concerned with development process, i.e. the United Nations, the Organisation for Economic Co-operation and Development (OECD) and by many individual writers. They argue that further improvement in the quality of life will depend on the production and distribution of information. Also, they argue that the availability and usability of the right information, reliable and relevant to our needs, could be recognised as a yardstick for distinguishing developed from developing countries. Poskett (2) states that:

Daniel Bell has made it clear in his book The Post-Industrial Society that we now live in an age in which information has succeeded raw materials and energy as the primary commodity.

On the same subject, Head (3) mentions:

... is our long-held belief that knowledge is not only valuable but also perishable, that in the developmental process, knowledge is not only the
most significant single ingredient but all too often the least well husbanded.

In the opening of the Meeting of Experts on the National Planning of Documentation and Library Services in Arab Countries in Cairo from 11-17 February, 1974, Yousef El-Sebai, the Minister of Culture (4) stated that:

Arab countries in their present state of renaissance need to give special attention to information because information assembled and properly organised is an indispensable structure in the building of the new community.

Harby (5) argues that:

The advancement of the developing countries depends on the fact that they have to 1) catch up with the progress in all spheres and 2) become a positive element in progress. To achieve this, developing countries must start from the point that the developed countries have reached. In this respect the role of information is most important. To take off they must gather all the up-to-date information available in the various spheres. This requires that the developing countries collect and abstract pertinent and suitable data for their developing process. The result of this is that these countries accumulate a tremendous amount of data which has been collected from different sources and languages and has to be selected, abstracted and disseminated regularly so that development projects can make use of other countries' experiments ... all this should be at the disposal of those who plan for the future of the country.

And Lohner (6) states that:

... information is an international resource and publishable information should be freely available (i.e., without undue restriction) to all users in all countries.
Further evidence of the recognition of the role to be played by information in development is provided by the national, regional and international meetings, conferences, seminars on various aspects of library and information services.

Therefore, it is important that this resource should be managed, utilised, co-ordinated and organised so that it may contribute to the progress and betterment of the quality of life of the nations. In the present study, the case is examined for the Iraqi government to give priority consideration for the planning, funding and systematic development of a co-ordinated national information system to assess the socio-economic, educational and scientific and technological development in the country. At the Intergovernmental Conference on Scientific and Technological Information for Development - UNISIST II - Paris 28 May - 1 June, 1979 (7), in part B, which dealt with general problems of the "Flow and Utilisation of Scientific and Technological Information and its role in Development", the delegates stated that scientific and technological information, and other types of information needed for purposes of development, were seen to be essential to the whole process of development. This approach led speakers to several conclusions:

(a) Information is an international resource and published information, together with that which can be readily published, should be freely available to all users in all countries.

(b) National structures must be strengthened to the point where they are capable of receiving and handling information and promoting its effective utilisation, the cost of doing this was relatively high in the smaller and less developed countries, if they were to achieve a basic minimum of service and one delegate
stressed the need for information services to be cost-effective.

(c) National information policies should be developed at a suitably high level, so as to promote both maximum awareness and utilisation of existing universal information systems and the creation, or improvement, of local sources of information, which are essential to the development process.

(d) For this purpose, information derived from science and technology should be defined widely, to include not just bibliographic information, but databanks, patents and other sources of factual, and when appropriate, evaluated, information.

(e) Increased emphasis should be placed on the repackaging of information in appropriate forms and in the local languages for the many different kinds of user in development activities.

(f) The circumstances of each country are specific in nature and it is unwise to introduce a model information system from outside with due consideration of national circumstances.

(g) The UNISIST programme, on both its achievements and its prospects, is particularly well fitted to stimulate and support the promotion of developments outlined above.

The establishment of many national, regional and international information systems and programmes, and expenditures allocated for this purpose are another evidence of the importance of information in development.

The international organisations, having recognised the
important role of information in development: took steps towards the aim of equal access of information among all nations of the world and, at the same time, towards a new international economic order. The economic imbalance between developed and developing countries was seen in the information field as in others. The new international economic order provided a broad framework within which Unesco could help to reduce, or remove, the imbalance and to make for greater equality between countries in the distribution and effective use of information. Therefore, individual countries had to build up national information structures capable of assessing the world's store of information and of adding to that store home-produced information which is essential to successful development in local conditions. Also, there should be cooperation not only between developed and developing countries to increase access to international systems of information, but among developing countries themselves, especially those with similar problems of development. The international approach was promoted and maintained by UNISIST and by its success - the General Information Programme (PGI).

In order to establish the role of information in development, our aim should be related to the continuing objectives of the PGI programme, particularly the creation of national and regional infrastructures within an appropriate policy framework and the education and training of professionals to staff the structures and of users to make effective use of the information services and to be capable of assessing the world's store of information. Therefore, we need to make a transition from traditional approaches to modern ones involving new technology. Also, there is a need of building up national ability to generate, handle, disseminate and retrieve information: Unesco support is needed and the Iraqi government needs to provide the finance and personnel for continuing operations. National, regional and international
information systems are built to provide a foundation for
development and action, to deliver information that is
useful to the consumer, especially to the user of the
system in science and technology, in terms of economic and
social development, i.e. these systems provide information
services to meet the user's needs.

It is very important and essential to know the information
needs of the various groups of users in such areas as:
industry, agriculture, education, social services, planning
and administration, etc. This is to ensure that the
national information system is planned to meet these needs,
because each group of users seeks information for different
needs: some users seek information for research and
development, some seek information for leisure, some seek
current information, some seek retrospective information,
others seek for personal needs, reading or repairing a
certain instrument at home, etc. Also, we have to remember
that these users have come from different backgrounds and
different family environments as stated by Ford (8):

We need to study information-seeking behaviour in
the context of people's temperaments, interests,
attitudes and total life situations. The
insights and understanding to be gained from such
studies would be of great practical value to the
planners and providers of information services.

In Iraq, there is no User Studies Research Centre to study
and investigate the user's information needs. If we expect
to give an effective information service, the knowledge of
the users' needs is a pre-requisite, and it forms the basis
upon which development of new information services and
improvement of the existing ones can be founded. Ford (9)
states that:

Research on users is to further understanding of
the processes of information transfer, the
research may be expected to lead to the
improvement of information transfer systems of all types and to have implications for the organisation of communication, the distribution of resources and the relationships between systems.

Also, there is no Focal Point, or a National Council, or Co-ordinating Body with competent and adequate manpower to carry out its tasks efficiently and offer information services to meet the users' needs, such as gathering the sources of information, formal and informal, books, periodicals, abstracts, indexes, bibliographies, proceedings of meetings, conferences, seminars, audio-visual material, films, micro-films, fiche, and other material such as maps, etc., and then storing this material, retrieving it and disseminating it to the users when needed. When the above-mentioned information services are in existence, the second stage could be application of computers to exploit these collections, so that the information generated within the country can be retrieved when it is needed for development purposes, as well as the information generated in the rest of the world. The users in different fields of research and development need different types of information services, such as: industrial services, agricultural services, planning and public administration services, and social services such as medicine and health, population activities, community development, etc.

These information services need to be provided by national professionals with the help of Western experts in the field from the developed countries, especially United Kingdom or United States because; firstly, national professionals have lived with users' information problems and know the whole environment of the users and, secondly, the research workers, or the users, do respond to an expert more than to national professionals, even to the
competent ones, because psychologically they feel that a foreign expert is superior to the national professionals. This situation might be true for two reasons: (1) most of the information users are graduates of the United Kingdom or United States universities, and (2) it may be the effect of the colonial period on the people, which made them believe that the Westerners were their superiors, and this feeling grew up with the people and still exists.

The idea of identifying the users' information problems, both current and future, is essential for the designers and planners of the information systems, because they need to know who is going to use this system and how much it is going to be used; in other words, they should know their users and their problems well, so that they can plan or design the system accordingly. Information business is like producers and consumers, or selling and buying, therefore, we have to know our market and act accordingly. For library and information services to be properly utilised, they should anticipate the needs of the community for which they are primarily established. In Iraq, there is a gap between the services provided and the actual needs of users. This arises because the introduction of modern library and information services has tended to be based on, or derived from, traditional library services with no consideration being taken of the categories of users and their varied needs. The users are very seldom associated with the planning and operation of the services. Once the services have been established, no systematic effort is made to publicise and market them, to attract users, and to evaluate the use of information in development, and the efficiency of the services provided. The information services provided are generally deficient, so that users have no faith in these services. In Iraq, no publicity for the services is available to potential users and no attempt to stress the importance of information as a national resource has been made. Library and information services
and their potential users almost live in isolation from each other. Therefore, efforts are needed to introduce information to the society as a major objective in the general flow of communication. Publicity campaigns to demonstrate the importance of information as a resource are required in this respect. Equally, action to identify the users' needs and the factors that motivate them is required.

In general, professionals believe that, to offer an effective information service, they should have people with specialisation in different fields of knowledge, because it is true that a librarian-chemist can offer much better information services in chemistry than another one with, e.g. a history background. In Iraq, it is very difficult to convince people with scientific or technological qualifications to work in libraries or information units because their status and pay are much better elsewhere other than libraries.

Besides, the closed access system imposed on the circulation of material in most of the libraries in Iraq, as well as in other developing countries, has its adverse impact on the utilisation of library materials. Thus, the reader cannot browse along the shelves to find out for himself more about what he needs. Access to locally-produced information is not as satisfactory as it ought to be. There is no systematic collection of reports produced by the government, or on its behalf, since most of the reports produced are not published, their potential users are unaware of their existence and a valuable information source is wasted.

As we are examining the existing infrastructures in Iraq and trying to establish effective guidelines for their development within the conceptual framework of the General Information Programme to meet the users' information needs
for development plans of the country, we shall study the role of information in educational, social and cultural, political, scientific and technological and international understanding development.

2.2 INFORMATION FOR EDUCATIONAL DEVELOPMENT

Education is the essence of the development in any society. Along with education, there must be organisation and discipline of people which enables them to utilise their resources and their own potential. The library and information services constitute a significant element of the total educational services available in a country; and thus their role in the educational process is indispensable. A library-oriented education builds in students the habit of finding out about, searching for information, evaluating and coming out with ideas and information. This habit may stay with the student in his future life. This student may hold an important position in government, industry or others. When decision-making and planning, he must depend on the right informational sources because he is aware of the vital role of information and before taking any decision he will search for the right information and check many sources of information to familiarise himself with all available informational data. Then he will make his decision on the basis of that data, unlike the student who had memorised his lectures throughout his educational life and was not aware of the role of library and information services in development.

Any educational institution is incomplete without a library backing up its educational programme. It is mentioned that universities will be as good as their libraries. This indicates the intimate relationship between the educational programme of the university and the programme of its
library.

Also, library and information services have a remarkable role in continuing education and in providing educational policy-makers and planners with information needed for the process of educational planning and development.

In Iraq, the expansion of education at all levels, educational planning, educational research, training of teachers, adoption of new methods and the reinforcement of functional literacy programmes led to many changes in society and local communities. This change needed them to have access to information at all levels and to make use of it in order to satisfy their new needs and to progress. Therefore, the new society needs to know about the new discoveries and new changes taking place in other parts of the world, both developed and developing countries.

One of the basic means of learning about their new needs is through free access to information existing libraries, documentation centres, archive centres and in the mass media (newspapers, radio and television, etc.). The problem begins here because, in Iraq, the local communities cannot have free access to the information existing in university and college libraries and government libraries, the only access they have is to public libraries. Unfortunately, the present situation of the public libraries is disappointing; their collections are poor, their staff are not trained well, or are not professionals in most cases, their premises are not purpose-built, and they do not have any educational programmes to attract local communities to come and make use of them. Today, the government realises the dangers of illiteracy and is very much concerned about this problem. Legislative measures have been introduced to eliminate illiteracy and improve educational standards. Free education has been adopted as a national policy at all
levels. Also, the government in 1978 issued a law that all illiterate people under 40 years of age should attend evening schools for three years, otherwise they face punishment. This was an important move, but the campaign would have been more fruitful and more successful if it had been backed up by local libraries, because it is not enough to depend on education where educational system depends on the traditional "chalk and talk" method of teaching. A library service can give continuing support to teaching and learning programmes and provides an impetus to educational change. It provides means for self-development of the individual/group at whatever stage of education, closing the gap between the individual and recorded knowledge.

The University of Baghdad, realising the urgent need for research in education, both in theory and in practice, established the Educational and Psychological Research Centre in 1966. This centre carries out educational and psychological research studies to make education an effective power for the acceleration of economic and social development.

The system of education in Iraq carries much of the blame for the small use of libraries and information services. There are no incentives for students to seek out information. The problem is compounded, since some libraries offer no encouragement to students either. Therefore, it is not surprising that most students graduate from university never having written an essay, a term paper, or a report depending upon using non-class materials. Thus, the students develop without being able to think for themselves, or to continue learning on their own, or adapt to changing conditions. There is no basic training, or orientation courses, in how to use a library, nor any consideration of what are the information activities that a library or information centre can offer at primary, secondary or tertiary education. In other
words, the educational system as a whole does not treat libraries and their utilisation as an essential and integral part of the teaching process.

In recognition of the need to develop Iraq's human resources to meet the requirements of economic development and growth, educational and training institutions are expanding at all levels. The 1977 Census (10) shows that the total number of students at all levels was then 2.89 million, of whom 80.2 thousand were in higher education and 35.2 thousand in technical education. In 1981, (11, p. 131), it was stated that the enrolment in:

primary schools was 1,947,182
secondary schools was 555,184
universities was 71,536
college & technical institutions was 9,962

The 1989 Unesco Statistical Yearbook (12) gives the following information:

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<td>69,812</td>
<td>1,776,095</td>
</tr>
<tr>
<td>1980</td>
<td>11,284</td>
<td>94,000</td>
<td>2,615,910</td>
</tr>
<tr>
<td>1984</td>
<td>9,897</td>
<td>115,642</td>
<td>2,754,887</td>
</tr>
<tr>
<td>1985</td>
<td>8,127</td>
<td>118,442</td>
<td>2,816,326</td>
</tr>
<tr>
<td>1986</td>
<td>8,210</td>
<td>123,310</td>
<td>2,920,959</td>
</tr>
<tr>
<td>1987</td>
<td>7,954</td>
<td>119,280</td>
<td>2,996,953</td>
</tr>
</tbody>
</table>

**TABLE 5:**

EDUCATION AT THE SECOND LEVEL (GENERAL, TEACHER-TRAINING AND VOCATIONAL): TEACHERS AND PUPILS IN IRAQ (14)

<table>
<thead>
<tr>
<th>Year</th>
<th>Teaching Staff Total</th>
<th>Pupils Enrolment Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>21,454</td>
<td>525,255</td>
</tr>
<tr>
<td>1980</td>
<td>33,514</td>
<td>1,033,418</td>
</tr>
<tr>
<td>1984</td>
<td>40,715</td>
<td>1,131,521</td>
</tr>
<tr>
<td>Year</td>
<td>Teaching Staff</td>
<td>Students Enrolled</td>
</tr>
<tr>
<td>------</td>
<td>----------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>1985</td>
<td>42,998</td>
<td>1,190,833</td>
</tr>
<tr>
<td>1986</td>
<td>48,459</td>
<td>1,178,761</td>
</tr>
<tr>
<td>1987</td>
<td>50,138</td>
<td>1,161,578</td>
</tr>
</tbody>
</table>

### General

<table>
<thead>
<tr>
<th>Year</th>
<th>Teaching Staff</th>
<th>Students Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>19,397</td>
<td>493,384</td>
</tr>
<tr>
<td>1980</td>
<td>28,552</td>
<td>954,536</td>
</tr>
<tr>
<td>1984</td>
<td>33,867</td>
<td>997,071</td>
</tr>
<tr>
<td>1985</td>
<td>35,143</td>
<td>1,038,627</td>
</tr>
<tr>
<td>1986</td>
<td>39,261</td>
<td>1,012,426</td>
</tr>
<tr>
<td>1987</td>
<td>40,438</td>
<td>985,123</td>
</tr>
</tbody>
</table>

### Teacher-training

<table>
<thead>
<tr>
<th>Year</th>
<th>Teaching Staff</th>
<th>Students Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>403</td>
<td>8,096</td>
</tr>
<tr>
<td>1980</td>
<td>814</td>
<td>21,958</td>
</tr>
<tr>
<td>1984</td>
<td>1,210</td>
<td>30,459</td>
</tr>
<tr>
<td>1985</td>
<td>1,110</td>
<td>26,767</td>
</tr>
<tr>
<td>1986</td>
<td>1,169</td>
<td>27,039</td>
</tr>
<tr>
<td>1987</td>
<td>1,300</td>
<td>27,965</td>
</tr>
</tbody>
</table>

### Vocational

<table>
<thead>
<tr>
<th>Year</th>
<th>Teaching Staff</th>
<th>Students Enrolled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>1,654</td>
<td>23,775</td>
</tr>
<tr>
<td>1980</td>
<td>4,148</td>
<td>56,924</td>
</tr>
<tr>
<td>1984</td>
<td>5,638</td>
<td>103,991</td>
</tr>
<tr>
<td>1985</td>
<td>6,745</td>
<td>125,439</td>
</tr>
<tr>
<td>1986</td>
<td>8,029</td>
<td>139,296</td>
</tr>
<tr>
<td>1987</td>
<td>8,400</td>
<td>148,490</td>
</tr>
</tbody>
</table>

---

**TABLE 6:**

**EDUCATION AT THE THIRD LEVEL: TEACHERS AND STUDENTS BY TYPE OF INSTITUTION IN IRAQ (15)**

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>Year</th>
<th>Teaching Staff Total</th>
<th>Students Enrolled Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>All institutions</td>
<td>1975</td>
<td>3,801</td>
<td>86,111</td>
</tr>
<tr>
<td></td>
<td>1980</td>
<td>6,703</td>
<td>106,709</td>
</tr>
</tbody>
</table>

64
In 1989 (16), the school enrolment and the teaching staff in Arab states were:

TABLE 7: SCHOOL ENROLMENT (THOUSANDS)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>23,197</td>
</tr>
<tr>
<td>1980</td>
<td>30,764</td>
</tr>
<tr>
<td>1985</td>
<td>39,399</td>
</tr>
<tr>
<td>1986</td>
<td>41,291</td>
</tr>
<tr>
<td>1987</td>
<td>42,888</td>
</tr>
</tbody>
</table>

2.3 INFORMATION FOR POLITICAL DEVELOPMENT

The political leadership, in setting up their plans, decision-making and development projects in all fields, especially the technological and scientific, need information on which to depend in carrying out these projects. If they do not become aware of what is happening in other parts of the world, they cannot make the right decisions. They may learn from the mistakes that have happened in other countries, therefore, they need a well-developed information system through which they can have
access to information resulting from research and development in the developed and developing countries. The transfer of information available in the industrialised (developed) countries to the developing countries is often thought to be inhibited by many obstacles, such as the economic, technological, linguistic but most often they are of a political nature.

In many developing countries, internal political problems, including lack of long-term planning, are a serious handicap for the coherent development of information systems. Political and administrative changes cause policy shifts at all levels, and even cancel out previous achievements. Thus, many programmes are started, but are never finished. In Iraq, the political situation was, and is, critical, unstable and unsettled. This affects the behaviour of the research workers, who need peace of mind in order to be able to think clearly, to be creative and carry out their research work satisfactorily. This is one of the reasons why their productivity is low and development programmes are poor. Also, all literature coming into the country is censored by the government, so there is a lack of some very important research results needed urgently in projects carried out in the country. Top administrative people, responsible for information centres, are also likely to be changed and transferred to other activities. This causes management disruption. Winfobi (17) emphasises that:

Constant political instability has created management problems for the practising librarians.

2.4 INFORMATION FOR SOCIAL AND CULTURAL DEVELOPMENT

The socio-economic growth of the country (i.e. the new social and economic changes in the community and the growth
of population) have created new information needs. To meet these new needs of society, modern techniques should be used in providing information services to satisfy these needs. In this section, we consider the importance of providing information to the general public and how this can contribute to the overall national development.

The development of any country is heavily dependent on its citizens, who are capable of responding and adapting to changing and challenging conditions. Such citizens can only be found in an informed society. An informed society supports its country's development programmes and effectively contributes to their implementation and maintenance of their achievements. In an informed society, people, according to the quality and quantity of information they have access to, can analyse, evaluate and present ideas. In an informed society, citizens can understand their duties and their rights. In this context, one can touch upon the importance of information for developing social change. For this reason, dictatorial regimes may view an informed society as a threat to their existence and thus ignore, or pay no attention to the establishment or development of library and information infrastructures. Citizens have to make decisions in their lives and need relevant information for their own decision-making process. They need information about their surroundings, for self-development and fulfilment. Socially, until recent years, the majority of the people have been living on farms; illiterate, having few schools, but the social and economic life of the country has been changing continuously in the last twenty years because of the enormous oil revenue which is invested in the development and industry of the country. Today, as we mentioned previously, the number of schools, technical institutes and universities is increasing. There are doctors, engineers, lawyers, teachers and technicians of both sexes. The educational system is a basic factor in
changing the society, deciding its position, and forming the more productive, skilled human elements which are very important in the economic and social development.

There are libraries in most parts of the country, but there is no network among these libraries, and there is no single library that knows what exists in other libraries. There is no national information system to organise, control and co-ordinate the information services in the country in a systematic way to meet the information needs of the different groups of the general public. The availability of efficient libraries and information services to satisfy the needs of the general public seem necessary, if society is to develop.

2.5 INFORMATION FOR SCIENTIFIC AND TECHNOLOGICAL DEVELOPMENT

The role of science and technology in economic, social and cultural development is very significant today. This is true world-wide; Havard-Williams (18) states:

Since the nineteenth century, the social role of science and technology has grown so that their consequences affect not every man, woman and child in industrialised countries, but the evidence of science and technology is to be seen perhaps in a rudimentary form, all over the world - the technology of the motor car or automobile, for instance, or that of the results of pharmaceutical science are present in most areas of the world.

Today, a vast expansion of R & D programmes are taking place in most developing countries. The tendency of these countries is to build up their own technology, either by transferring the very sophisticated technology of the developed countries, or by transferring their intermediate technology in all subject fields (i.e medicine,
agriculture, atomic energy, defence, etc.). This tendency suggests the need for automated information centres to link up co-operatively and effectively with other sister institutions locally and internationally and to have access to their information activities in order to keep the technological activities moving. During recent years, there have been strong voices both in the United Nations and in Unesco for the establishment of a new international economic order which will make it possible to eliminate the widening gap between the developed and developing countries. The Seminar on International Co-operative Information Systems organised by the International Development Research Centre in 1979 (19) suggested that:

Each country should have a policy on scientific and technological information as an integral part of its overall science and technology policy for development in order to maximise the national utilisation of the world stock of knowledge; national science and technology information infrastructures should be developed and/or strengthened so as to collect, process and disseminate information of importance to the individual country whether such information has been generated inside or outside the country, and should have access to and be capable of utilising all information systems ...

Improved information services do have a favourable impact on R & D activities and on the dissemination of their results to the people for whom the research is done and who should benefit from it.

Scientific and technological advancement is like a pyramid; knowledge is built on knowledge, the scientists of the present build on the achievements of the former ones and so on. It depends on the availability of information infrastructures that efficiently collect and store the information generated and disseminate it to those who need it. Thus, the wheel of scientific and technological development is kept going.
Tell (20) states that:

... today there are many different approaches to providing technological information to developing countries. One way is to follow the traditions in the industrialised countries, and in a young nation to set up a documentation centre. That centre will acquire all the major primary and secondary publications in science and technology, since these contain most of the information resulting from R & D in the industrialised countries. These publications may seem difficult to digest so the centre tries to hire qualified and language-trained specialists to screen the material. Their task is to sift out information, translate it into abstracts to be presented in the native abstract journal which is then disseminated to governmental and private enterprises in the hope that its contents should be applicable to the local situation. Another way is to encourage multi-national companies to set up affiliations in the country in the hope that the advanced technology they use will generate local innovations, and thus assure a technological leap for the country ... the usual approach is to set up a centre intended to assist the country. This institutional approach has been heavily stressed by Unesco, especially in the UNISIST program. ... the advent of computers, electronic communications networks, and huge databanks have contributed to closing the information gap which was earlier thought to be unavoidable because of information overflow. This is true in the industrialised countries but it not yet suitable for developing countries. Instead, it is claimed that the developing countries should build up a meticulous infrastructure of service organisations by emulating the traditional libraries and documentation centres of the industrialised countries. Such a task is commendable but does not take into account the time factor, nor the shortage of personnel, premises and material.

The aim of introducing new techniques and devices for gathering, indexing, storing and disseminating information rapidly and effectively at reasonable cost is because scientific and technological development depends heavily on the availability and efficient management of scientific and technological information. Unesco, FID, IFLA, ALECSO and other international organisations' activities through their
seminars, meetings, conferences and fellowships have contributed a great deal in adopting these techniques and in using information for advancement and progress in all fields of development.

As Iraq is partly an agricultural country, there is an urgent need for information to be used in the development of agricultural projects. Research work on agriculture is being carried out in at least three main research centres— the College of Agriculture at University of Baghdad, the Central Laboratory at the Ministry of Agriculture, and the Agricultural Research Centre at the Scientific Research Council—but the results of the research work carried out in these three centres is not known to the users in the others. In other words, there are no communication networks and no co-ordination in the research programmes carried out in the three centres. This is a result of lack of a central body responsible for controlling and co-ordinating the information existing in these centres, in particular, and in the whole country in general. Therefore, in many cases there is duplication in the research projects. The results do not reach all parts of the country, i.e. they are not disseminated to the farmers who are most in need of new ideas and new experiments which could help them in producing more and developing the old techniques they are using now. A good number of the farmers are illiterate and live far from the main cities. There are few information facilities through which the new techniques could reach them (such as agricultural educational programmes on radio or television explaining the new ideas and modern methods used in developed countries). At the same time, many farmers are opposed to using the new modern techniques which will help them in developing their agricultural system.
2.6 INFORMATION FOR INTERNATIONAL UNDERSTANDING

The Meeting of Experts on the National Planning of Documentation and Library and Services in Arab States, 1974 (21) realised that:

... successful national development can be achieved only if there is international co-operation giving each country access to experience gained in others, and in the international field ...

International understanding based on accurate information can successfully lead to the design and implementation of support programmes allocated to needy countries by aid-giving agencies or countries. Thus, information contributes to improving human relationships in societies and between people of different cultures and traditions, which leads to better international understanding and cooperation.

International co-operative information systems offer to the world and, in particular to the developing countries, information that is needed for policy-making and for decision-making, first, as applied to science and technology in particular and then as applied to economic and social development in general. They also offer information co-operation between nations and their governments. As the governments are the most significant producers of information, and control the information they produce, they can decide whether to make it available to their citizens and to foreigners. Governments can co-operate if they are looking forwarded to receive information from other governments in exchange. Also governments are potentially the major users of information.

As Unesco is the major international organisation which offers international information co-operation, it is
essential to the systematic development and use of information systems in its member States. This cooperation could be between developed and developing countries.

During the period of the Second World War, and immediately after the war, initiatives for new information systems were increasing. People began to develop information systems whose scope was defined not by scientific disciplines, but by economic activities. It was realised that information had economic value and that it was worth investing public funds for the development of information systems. Woolston (22) states that:

The shift in responsibility away from the scientific community and toward the central government agencies has been accompanied by a shift in the way the systems are defined. New systems are seldom now defined by disciplines. The old systems continue to meet important needs, but the new systems are not discipline-oriented, they are mission-oriented. The mission is some economic purpose - to promote the peaceful uses of atomic energy, to grow more food - which can be realised only if one collects information from many different disciplines; so the mission-oriented systems are multidisciplinary. The most recent systems that have been started or proposed are ones that take economic and social development as the mission, and the purpose is identifying and delivering information that can be useful in planning and in decision-making related to the development of a country. Hence, they are concerned not only with scientific and technical information that may be important in decision-making but also with economic information. ... he continues: in the declaration on a new international economic order, there are several statements that call for the sharing of knowledge among countries on a basis of equity. International Co-operative Information Systems are the most equitable device for making knowledge available to all.

There are many international co-operative information systems now in existence. Examples are:
INIS: International Nuclear Information System

AGRIS: The International Information System for the Agricultural Sciences and Technology


INFOTERRA: An International Information Network on Environment

DEVSIS: Development Sciences Information System

POPIN: An International Information Network for the Population Field

UNIDO: Helps Developing Nations choose Technology

UNESCO's CDS/ISIS: Computerised Documentation System/Integrated Set of Information Systems was developed in 1975.

2.7 SUMMARY AND CONCLUSION

Information as a resource has an essential role to play in the development process of societies in just the same way as other resources (energy, matter, etc.).

The importance of information to development has been increasingly recognised by those concerned with the development process. The availability and usability of the right information, reliable and relevant to the country's needs, could be recognised as a yardstick for distinguishing developed countries from developing
countries. The developed countries and the international organisations give high attention to information management.

If information as a resource is to play its role in development effectively and efficiently, it must be well-managed and fully utilised. Developing countries, such as Iraq, which are struggling for their own development, need to give a high attention to the development of their library and information infrastructures and services. It is only in this way that information as a resource can be utilised to support the development process of these countries.
REFERENCES


4. EL-SEBAI, Y. 'Opening Address', Meeting of Experts on the National Planning of Documentation and Library Services in Arab Countries, Cairo, Egypt, 11-17 February, 1974, p. 1.


9. Ibid.


13. Ibid., p. 3-94.

14. Ibid., p. 3-176.

15. Ibid., p. 3-251.


18. HAVARD-WILLIAMS, P. & FRANZ, E. G. Planning


CHAPTER THREE

THE NEED FOR DEVELOPING A NATIONAL FRAMEWORK FOR INFORMATION SERVICES IN IRAQ

3.1 INTRODUCTION

The structure of the existing information services in Iraq - the infrastructure - consists of: the national library, academic libraries (college and university), public libraries, school libraries, special libraries, documentation centres, National Centre of Archives, government libraries, libraries of learned societies and associations, the Arab Gulf States Information and Documentation Centre, the Arab Literacy and Adult Education Organisation, the Federation of Arab Scientific Councils, the British Council library, the United Nations Information Centre, the French Cultural Centre library, Hispano-Arabic Cultural Institute library, and Soviet Cultural Centre library. The fundamental infrastructure of information services in the country is shown in Figure 1. The libraries/information centres have been discussed in Chapter One of this thesis, under 1.8 - 1.8.7.

Although these information centres provide a few information services, Iraq does not possess a unified national information system; that is, a system with a network of information services that could be used in the development plans of the country. What is needed is a system that can provide information services for the users at home, can communicate internationally, and can provide information services in all fields of knowledge - scientific and technical, economic, social, financial, administrative, legal and so on - which are
Figure 1
needed for development. The establishment of such an information system might motivate the users by meeting their information needs. The results of their work can then be used in the development plans and projects which eventually lead to prosperity of the whole nation.

In Iraq, the functions and services of the existing information services (libraries, documentation centres, and archives centres) are still traditional, rather than dynamic. They are also fixed in the sense that they cannot be revised as need be, particularly if these centres hope to offer services responsive to the changing patterns of needs to meet the users' new needs. Some of these information centres have large collections but they are not exploited; as Coover (1) mentions:

... the value of the information centre can be known only in terms of its satisfying the users' needs.

In most cases, the collections of the libraries and information centres are housed in modern premises, but the buildings are not purpose-built. When building these premises, the responsible authorities do not consult specialised consultants in designing libraries and information centres' buildings.

3.2 THE SOURCES OF INFORMATION AND THEIR ACQUISITION

Acquisition of materials is very important because through acquisition we select the material needed to achieve the library's goals. Acquisition includes selecting, ordering, budgeting and receiving. Therefore, those on acquisition committees should have knowledge of books and other material publishing and production.
Acquisition for school and public libraries is based on what is available locally. The committees often do not think about the value and of the relevance of the material to the needs of the library community because they do not know, or are not aware of, the library community needs. There is no certain budget for acquisition; money spent on acquiring material is from the budget of the parent organisation. The situation is the same with special libraries. University libraries have a budget for acquiring material, but they lack the expertise required for efficient acquisition. The very problem of acquisition lies in the absence of any sort of acquisition policy which may define the type of materials to be acquired, sources, and methods of acquisition and payment. As has been noted by Unesco (2):

... there is not a national scientific and technological information policy in Iraq as an integral part of the country's science and technology policy in accordance with the aims and aspirations of its national development plans. Information units are set up without a clear description of the functions they are to perform, the users they are to serve, their information needs, and so on ...

The lack of a clear and defined acquisition policy has led to the collection of materials consisting of only books and periodicals. These are generally limited in scope, only partly relevant to users' needs and, in many cases, obsolete, because weeding out is not practised. Audio-visual materials, abstracting and indexing tools and other reference materials are poorly represented. Co-operative acquisition is not practised even among libraries within the same organisation. Materials are usually acquired from both local and foreign markets. Locally, the market is limited in quality, because of the low and imbalanced production of the publishing industry and also with respect to subject coverage, especially in science and technology.
The local market suffers from lack of publicity. Trade bibliographies are lacking and, where they are available, they are no more than lists of books.

Developing countries, like Iraq, depend a great deal on acquiring materials, particularly in science and technology, from developed countries where a much greater store of information is available. It is therefore necessary to acquire the information in whatever form it is needed by those engaged in development. In Iraq, the information infrastructures, particularly university libraries, special libraries and documentation centres, are acquiring materials from this market; but there are a number of factors hampering the efficiency of this trend and eventually preventing the fulfilment of the objectives. The major factor is the importing routine, which causes, in all cases a long time lag between the ordering and receiving of an item. The National for Distributing and Advertising, founded in 1972, is the sole organisation responsible for the importing, exporting and distribution of publications inside and outside the country. This House uses traditional methods and techniques in acquiring the materials. Acquiring information from databases available in many developed countries is not practised because modern information technology (i.e. computers) has not yet been applied, and communication channels, such as telephones and telexes, are still inadequate. This has denied scientists and research workers access to the latest developments taking place in their fields.

The problem of acquisition from abroad is a pressing one and requires attention by the authorities and librarians concerned. A sound acquisition policy is needed to cover such matters as the type and number of materials to be acquired, the sources and methods of acquisition, and payments. There is an urgent need to authorise special and academic libraries and the Scientific Documentation Centre
to import their required materials directly from abroad and they should be exempted from import procedures imposed on other goods. This would certainly minimise the time lag occurring at present and bring to the user up-to-date information.

If collection of materials is an important function of libraries, documentation and archives centres, so is the organisation of these materials to facilitate accessibility to them by users.

3.3 THE INFORMATION WORKERS - STAFFING

Qualified manpower is a basic factor in the success of any profession. The human resources are one of the major elements which form library and information services; the information workers collect and organise the materials, retrieve and disseminate the information needed by the users. Only the human element can bring library and information services to life and make them a dynamic, vital force for the community they serve. Adequate development of library and information services is mostly dependent upon the availability of qualified, efficient and capable personnel who can provide the professional leadership and services necessary to plan and implement library and information programmes.

In Iraq, lack of professionally qualified personnel is one of the major problems facing library and information services, so most library and information centres are staffed by insufficiently qualified personnel. A few of the professionals have obtained their Library Science degrees from abroad, but the majority have either two years' library education, or none at all. Provision of an adequate number of professional qualified manpower, based on a systematic manpower planning, is a necessity in
solving a part of the library and information problems. Manpower planning needs to be pursued to guide the design, development and operation of programmes for professional education and training of library and information personnel of different levels and categories. It should be integrated with the overall national manpower planning, as stated by Professor Havard-Williams (3):

Manpower planning ... indicates an attempt to foresee the demands both of the present and of the future and to plan the education and training needs accordingly.

The low prestige of the library profession tends to discourage all candidates who wish to work in a library. The Iraqi librarians, in particular, encounter several problems, one of these being the lack of appreciation of the need for libraries and their place in social and economic development.

3.4 LIBRARY EDUCATION AND THE TRAINING PROGRAMMES FOR INFORMATION WORKERS AND END USERS

Library education started in 1950s on a preliminary basis. Short courses were organised and sponsored by Unesco. Full-time library education was started at Mustansiriya University in 1970 with a course of two years' duration. It was offered to students who had completed high school, and led to a diploma qualifying them to be library assistants. In 1978, it was agreed to extend this Diploma to a four year bachelor's degree. The lengthening of the course may lead to a raising of the quality of students. Marco (4):

It appears that one sign of true progress in the world of library education is the movement towards increasing the amount of time involved in the professional programme, and in placing the
professional programme later in the total academic period of the students.

In 1976, a one-year postgraduate course was established at Baghdad University, giving a postgraduate diploma. The lecturers taught both at Baghdad University and at Mustansiriya University. Eventually, in 1977, the two schools were merged into one, and courses were offered at Mustansiriya University to both undergraduate and postgraduate students. Longer-term plans proposed include courses of study for the higher degree of Master of Science in Library and Information Studies, which will be designed to prepare honours graduates for careers in libraries and information centres in the country. In 1981, a library school was established and the courses were extended to a four-year programme at Mustansiriya University.

There are very few suitable, well-organised training programmes for information workers. Equally, there are no systematic training programmes for the users. In Iraq, the users need library and information orientation programmes and they need lectures on how to use the information tools, (e.g. indexes, bibliographies, etc.) They need to know how they can gather their information in all different subject fields and to be able to utilise the local information sources and the sources of information from other parts of the world. One of the defects of the educational system in the country is the lack of information training as an integral part of the education system. Hutteman (5) suggests five possible areas for the training:

1. national seminars for the establishment of information and documentation services;

2. national and regional training courses for information and documentation personnel;
3. continuing professional education courses;

4. development of teaching and learning materials;

5. scholarship programmes.

All these programmes are the ways and means of developing and improving the information services in any country, taking into account the advent of new information technology and the need for better management skills.

3.5 STANDARDISATION

The performance of library and information services can be efficiently assessed by the adoption of a generally accepted standard measures. The adoption of standardisation can also bring about compatibility and co-ordination of procedures and services. Standardisation covers classification and cataloguing, subject headings, physical facilities, personnel, opening hours and collections. In Iraq, standardisation in these fields is lacking. This has resulted in unco-ordinated and incompatible procedures and practices; inadequate bibliographic control; and eventually inadequate acquisition and utilisation of information sources.

The lack of standardisation is more a problem in classification and cataloguing the Arabic materials. The problem of cataloguing Arabic material is common to all Arab countries. This problem was identified by some Arab scholars in the profession and attempts to overcome it have been made since the early 1960s. At the Cairo Seminar, 1962, a code of Rules of Descriptive Cataloguing for Arab Libraries was accepted by the participants as a basis for future work toward the cataloguing of Arabic materials (6).
The Arab League also realised the problem of processing Arabic materials and organised conferences to discuss the problem of cataloguing, classification, subject headings and bibliographies. The First Arab Bibliographical Conference was held in Riyadh, Saudi Arabia, in 1973, and recommended the Arabization of the International Standard Bibliographic Description (ISBD) and compiling unified entries of Arab authors (7). The Second Arab Bibliographical Conference (8) was held in Baghdad in 1977 to see to the accomplishment of the work recommended in the first conference. Unfortunately, so far there appears to be no sound solution to the cataloguing problem: each Arab country and its individual libraries and documentation centres catalogue their materials in their own ways. Centralised and co-operative cataloguing is lacking. These factors have hampered the compilation of a union catalogue at a national level.

Regarding the classification of Arabic materials, the modified Dewey Decimal Classification (DDC) has been adopted to accommodate Arabic materials, particularly Islam, Arabic language and literature and Arab history. Lack of standard rules for the classification scheme is so widespread that almost every library has a different version of the DDC (including those in use in Iraq). The state of classification in Iraq, as well as in other Arab countries, requires the preparation of a union version of the classification scheme. The preparation of such a version must be a co-ordinated effort, so that the result may be acceptable to all concerned.

Regarding the subject headings, Sears List of Subject Headings is used in Iraq. The problem of formulating uniform subject headings for Arabic works is acute. The current practice is to translate from Sears List when treating Arabic materials; some lists in Arabic are available in individual libraries as a result of individual
efforts. There remains a need for the development of a special philosophy for the construction of an authority list in Arabic. The deficiency in subject headings is well recognised by Arab librarians and organisations, and efforts have been made and are being made to overcome this deficiency. The Arab League produced principles and rules for formulating subject headings in a document entitled 'Toward Arabic Subject Headings'. The Second Arab Bibliographical Conference (1977) recommended the adoption of such principles and rules by all Arab countries. The Conference also urged the Arab League to form a committee of specialists to prepare comprehensive Arabic subject headings, which might meet the needs of libraries and information centres in the Arab world.

3.6 COMMUNICATION FACILITIES

Communication facilities are essential for the effective flow of information. However, there are defects in the communication channels between the different categories of people who represent the main components of the information system, that is, the policy makers, the information professionals and the end users. These defects are due to differences in cultural and educational backgrounds and the dominance of bureaucracy at all levels in the country. Programmes for acquainting potential users with different forms of information sources, activities and services are lacking. The more information there is, the greater is the need for effective communication. Modern information activities need the back-up of well-organised libraries and effective communication. The depositories of the world's knowledge are, to a large extent, located outside Iraq's national borders, therefore only a strong communication network will permit the country to tap these depositories. Unfortunately, the communication channels in Iraq are poor, in this respect, because telephones and telexes are used
very little for the purpose of getting information from abroad. Formal communications (publications) are either out of date, or of poor quality; informal communication (person-to-person), conversation with colleagues, and face-to-face communication (conferences, meetings, seminars, conventions, etc.) is also rare.

Information technology is essential for communication in the country; the application and adaptation of computer techniques are needed to exploit the information sources at local, regional and international levels, especially since no single library or system can meet and satisfy all the users' information needs.

3.7 BOOK PRODUCTION AND PUBLISHING

The publishing industry in Iraq is limited and inefficient. The Meeting of Experts on the National Planning of Documentation and Library Services in Arab Countries, 1974 (9) noted that the weak points in the book production in the Arab World lie in its irregularity, imbalance and inadequacy.

The main problem facing publishing in Iraq and in almost all Arab countries, is that most publishing houses are not using new technology. Training opportunities are lacking in every aspect of publishing activity, and the publishing products are of low quality. In the whole of the Arab countries, the annual book production in 1980 has been estimated at 7,000 titles, representing 1% of the annual world production. Wogram (10) states that:

The very latest information covers 1978 when World book production totalled 642,000, of these, 527,000 were produced by developed countries, developing countries turned out 115,000 titles, they were thus producing only 17.9% of book titles.
A proper basis has not been established in the developing countries on which publishing and the book trade can be firmly built. Okeoku (11) says:

It is often assumed in developing countries that the book is a foreign importation, and therefore its development should be patterned on the theories and practices prevalent in the exporting country ... but surely nationals of developing countries should be able to recognise the vital role the book plays in their overall development and devote some of their thinking time to it. They should at least be able to seek the whys and wherefores of the publishing patterns imposed on them. Admittedly, at the political level very few developing countries make specific appropriations for the book, much less give it a priority rating, although they spend upwards of 30 per cent of their annual budgets on education. Only occasionally is something done, as an afterthought, for libraries. Yet the book is the tool in education. It is time a high priority rating for the book was asserted through systematic studies of the subject. Perhaps, confronted with the results of such studies, governments might be persuaded to take note.

The purpose of a domestic publishing industry is for education and entertainment. The publishing industry in Iraq is behind the times; it does not keep pace with public taste, nor with what the community needs and not with the changes that occur. Hence, there is a need for the government of Iraq to establish a sound foundation for the growth of an indigenous book publishing in the country. It is essential for this study to study the background of the people, their reading tastes, education, spending, leisure time, and the system of education - whether it encourages the reading habit and the personal possession of books, magazines, etc., or whether it enforces the reading of textbooks without providing for reading for pleasure, etc.

The publishing industry, whether operating on a profit-making basis or otherwise, is an important information source and it has a vital role in overall development and
education. In most publishing houses in Iraq and in almost all Arab countries, modern techniques are not used, and all the material must be checked by a government body before it is released for publication.

As things stand, a major government effort is necessary, since no book development strategy can succeed without substantial subsidies and sustained support from the government.

So far as planning for book development is concerned, Abul Hasan (12) has pointed out:

Any endeavour to formulate a national book development plan should precede a recognition on the part of national authorities of the important role of books in the development of the individual and in the progress of society. Books have long demonstrated their effectiveness as the least expensive and the most essential instrument for the preservation and transfer of knowledge. They serve as a repository of the cultural heritage of a people and also as a means of disseminating it. Books are also the most important vehicles for expressing new ideas, minority views, dissent and criticism. They are indispensable factor for economic growth, particularly in today's technological society. If we look at the world's largest book producing countries, there would appear to be a direct positive correlation between book publishing and social and economic welfare. A great quality of the book industry is that it requires only limited capital investment and is capable of efficient organisation in small enterprises. Despite - or, perhaps, because of - their meagre claim on national resources, books have often not received the attention they deserve from national planners.

On the subject of book production and publishing in the developing countries, Pearce (13) reports that:

The supply of suitable textbooks (the term "textbook" as used here includes other printed materials which would normally be produced by educational publishers) is improving in most less developed countries, and the not so distant days
of the past when it was possible to find schools with only a few, often unsuitable, textbooks, or even with none at all, are disappearing.

The importance of the role of the textbook as the least expensive and most effective way of improving academic standards is now almost universally accepted. Forecasts that textbooks would be replaced to a large extent by educational radio or television programmes, tape-recorders, and learning machines, etc., have not proved to be correct, especially in the less developed countries. In fact, although these valuable electronic aids to education have played a much more prominent role in the last twenty years or so, it seems likely that they have stimulated further the demand for textbooks rather than replacing them.

... It appears that not only have almost all less developed countries accepted the importance of the role of the textbook in education, but that also many of them have taken energetic steps to improve the quality and quantity of textbooks. Numerous new publishing organisations have come into existence to meet these needs. Struggling against considerable difficulties, many of these have done well, but few have achieved the standard of excellence that their founders would like to see in the quality of the texts, illustrations, production, or quantity of titles, or the ability to get them into the hands of students ... one of the major causes of problems in less developed countries is the lack of proper publishing infrastructure and trained staff, or plans to train ... thus the publisher is responsible for research, planning, financing, editing, illustrating, designing, obtaining quotations for printing, supervising many aspects of production, stocking, advertising, and selling the finished book.

3.8 BIBLIOGRAPHIC CONTROL

Even the large library/information centres cannot supply all the necessary material needed by users, so, bibliographic control is one of the most important aspects of the information services. Publications by themselves are of no value to the information community without the
records which inform of their existence and provide access to their contents. Through bibliographic control, the information community - the users - can have access to all information sources on national, regional and international levels. The current trend is to develop Universal Bibliographic Control, but national bibliographic control is regarded as an essential requirement to promote UBC. The latter is a long-term programme adopted by IFLA and Unesco as a major policy objective to promote a world-wide system for the control and exchange of bibliographic information, in order to make universally and promptly available, in a form which is internationally accepted, bibliographic data on all publications issued in all countries.

In Iraq, as well as in other Arab countries where classification and cataloguing tools are deficient and not yet unified, bibliographic control is equally deficient. The National Library used to issue the Iraqi Bulletin for Publications: and in 1970, the Deposit Law was passed and the National Library was designed as the legal depository for Iraqi publications (14). In 1975, the title was changed to the Iraqi National Bibliography. After the acceptance of the Arabic language preservation law in 1977, the title was changed to Al-Fahras Al-Watani Lel-Matbu'at Al Iraqiya, whilst maintaining the English version (15). However, the Iraqi National Bibliography does not meet the international specifications recommended by the International Congress on National Bibliographies held in 1977 (16) with respect to the material included in national bibliographies, presentation of the printed national bibliographies, and content of the bibliographic record.

In Iraq, other agencies issue general and specialised bibliographies. These include the Central Library of Baghdad University, Scientific Documentation Centre and the Directorate of Documentation and Studies in the Ministry of Education. The inadequacies of bibliographic control in
Iraq lead to many problems in national acquisition work. Similarly, people living abroad face difficulty in finding Arabic material of interest. To solve the problem of bibliographic control, requires the development of the Department of Bibliography in the National Library into a national bibliographic agency, based on the international standards adopted by IFLA and Unesco, and equipped with the technical and human resources required to produce quality bibliographies. It will also require the compilation of a union catalogue of works published in, or on, Iraq and forming a part of the collection of libraries; a periodical and newspaper directory to include all continuations the production of standard trade bibliographies to facilitate the acquisition of Arabic materials locally and abroad; the inclusion of audio-visual materials in bibliographies; and the application of modern techniques in producing bibliographies to ensure speed and accuracy. If the documentation services together with the book trade and publishing are effectively organised, efficient bibliographic control could be achieved.

3.9 THE IRAQI LIBRARY ASSOCIATION

The Iraqi Library Association (ILA) was founded in 1968 in Baghdad with about 15 members. The main aim of this association was to bring together the librarians and information workers in the country or it was more social than educational in the field of librarianship and information studies. This Iraqi Library Association cannot be considered a professional association like the British Library Association, or the American Library Association. The role of a library association is important in improving the standards of the librarianship and information studies and the development of library services. The ILA does not publish a journal or any other publications that will contribute to the librarianship and information profession.
A professional association is very much needed in Iraq to enhance the general development of library and information services, but in order for the ILA to play its rightful role effectively, it needs to be accorded a legal status similar to that of the Engineers' Union, Lawyers' Union, etc., which provides for official recognition by the government, and leads to power and authority.
REFERENCES


2. UNESCO. Conference of Ministers of Arab States Responsible for the Application of Science and Technology to Development, on National and Regional Planning for Scientific and Technological Information Systems and Services for Development in the Arab Countries, Rabat, Morocco, August, 1976, pp. 16-25.


9. UNESCO. Meeting of Experts on the National Planning of Documentation and Library Services in Arab Countries, Cairo, Egypt, 11-17 February, 1974, COM.74/NATIS/REF.


4.1 INTRODUCTION

On the basis of data collected in a pilot survey which was carried out in Iraq in 1978, a comprehensive survey was carried out in 1989, covering all aspects of the existing information services in a more detailed way. This examined the information needs of users over a broad sample of the whole scientific community located in a variety of institutions in Iraq. The intention was to discover more about how the information services are working and to formulate objective guidelines for their development within the conceptual framework of the General Information Programme (PGI) of Unesco, as an integral part of national development plans in the country. Questionnaires, structured interviews, direct observation, discussions with colleagues (and the candidate's experience in the field) were used. A literature review was carried out to complement the data collected for this study. The number of institutions approached and the number of respondents in both surveys are given in Tables 8 and 9. In the pilot survey, 22 institutions were approached, 20 of these responded to the questionnaires. The response rate of the questionnaires survey was 87% and for the interviews, 68%, as shown in Table 8.
TABLE 8:
BREAKDOWN OF RESPONDENT GROUPS (1978)

<table>
<thead>
<tr>
<th>Respondents</th>
<th>No. Approached</th>
<th>No. Completed</th>
<th>Q'aire %</th>
<th>I'views %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrators</td>
<td>20</td>
<td>17</td>
<td>85</td>
<td>15</td>
</tr>
<tr>
<td>Research workers</td>
<td>20</td>
<td>19</td>
<td>95</td>
<td>18</td>
</tr>
<tr>
<td>Information workers</td>
<td>20</td>
<td>16</td>
<td>80</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>60</td>
<td>52</td>
<td>87</td>
<td>41</td>
</tr>
</tbody>
</table>

(For details, see Appendix II - The Results and Analysis of the Pilot Study Survey, 1978)

In the comprehensive survey, 54 institutions were selected; 50 responded to the questionnaires and the interviews. One hundred and fifty administrators, research workers and information workers were selected for study, but only 90 were approached because of limited time and poor communications. Eventually, seventy-five questionnaires were completed and sixty interviews were carried out. The response rate in the questionnaires survey was 83% and for the interviews, 67%, as shown in Table 9.

TABLE 9:
BREAKDOWN OF RESPONDENT GROUPS (1989)

<table>
<thead>
<tr>
<th>Respondents</th>
<th>No. Approached</th>
<th>No. completed</th>
<th>Q'aire %</th>
<th>I'views %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrators</td>
<td>30</td>
<td>25</td>
<td>83</td>
<td>18</td>
</tr>
<tr>
<td>Research workers</td>
<td>30</td>
<td>29</td>
<td>97</td>
<td>20</td>
</tr>
<tr>
<td>Information workers</td>
<td>30</td>
<td>21</td>
<td>70</td>
<td>22</td>
</tr>
<tr>
<td>TOTAL</td>
<td>90</td>
<td>75</td>
<td>83</td>
<td>60</td>
</tr>
</tbody>
</table>

4.2 EXPENDITURE ON EXISTING INFORMATION SERVICES

The administrators and the information workers were questioned as to what was the budget of their...
library/information centre, and whether they had a separate budget from that of the parent organisation. Table 10 shows the budgets of ten libraries/information centres. The total of ID 705,500 may be compared with the budgets of the ten libraries/information centres twelve years ago, when it was ID 445,000, a 37% increase. This seems to show that the government is spending more on information services, but, in reality, they are not because the inflation rate over this period is 400%. When the interviews took place, the majority (67%) of the research workers and 73% of the information workers commented that the government should spend more on library training programmes for the information workers and for the end-users - on up-to-date material, on new information technology, etc. The information workers said that information services are like any other business: the more the government spends on improving the existing services and developing new ones, the more these services contribute to the development plans in the country. According to 60% of the administrators, there are no financial problems. However, 73% of the information workers said that one of their pressing needs is finance; they are under-staffed, unable to acquire needed sources, especially reference material, bibliographies, abstracts, etc., in different subjects and unable to organise library information training programmes. There is, therefore, no consistency in the comments of the administrators and the information workers.

The budget of a school library in Iraq may be compared with a school library budget in the UK (namely St Mark's Roman Catholic High School, Hounslow, London with 900 pupils). The latter's library budget is (£4,200-£2000 from the school and £2,200 from School Library Services), and this seems reasonable. But the objectives and services of a school library in the UK differ from those of a school library in Iraq. Ideally, a school library in the UK has
a policy, that the librarian is involved in the curriculum development and is aware of what pupils are being taught. If there is no full-time qualified librarian available, there is a designated teacher with responsibility for the library. In a good school library in the UK, the stock is of good quality, up-to-date and in good condition. There is enough fiction, non-fiction and reference material, including a good range of magazines and newspapers, to enlarge the pupils' understanding of all areas of the curriculum and for other interests. The non-book sources of information, including information technology, are available to all pupils and staff. The pupils are trained in library and information skills. The library is organised so that the pupils and staff can find what they need. In Iraq, a school library provides few, if any, of the above-mentioned services. Hence, there is an acute need for the improvement and development of school libraries to enhance the education of pupils in the school.

TABLE 10:

BUDGETS OF 10 LIBRARIES/INFORMATION CENTRES (1989)

<table>
<thead>
<tr>
<th>INSTITUTIONS</th>
<th>BUDGET OF PARENT ORGANISATION IN ID</th>
<th>BUDGET OF LIBRARY/INFORMATION CENTRE IN ID</th>
<th>AMOUNT IN £</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al-Dora High School</td>
<td>70,000</td>
<td>500</td>
<td>1,000</td>
</tr>
<tr>
<td>Al-Markaziya High School</td>
<td>100,000</td>
<td>2,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Al-Karada High School</td>
<td>90,000</td>
<td>3,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Mosul University Central Library</td>
<td>2,000,000</td>
<td>60,000</td>
<td>120,000</td>
</tr>
<tr>
<td>Basra University Central Library</td>
<td>3,000,000</td>
<td>80,000</td>
<td>160,000</td>
</tr>
<tr>
<td>Centre for Education &amp; Pys. Research</td>
<td>-</td>
<td>70,000</td>
<td>140,000</td>
</tr>
<tr>
<td>Economic &amp; Admin. Research Centre</td>
<td>-</td>
<td>80,000</td>
<td>160,000</td>
</tr>
<tr>
<td>University of Technology Central</td>
<td>1,500,000</td>
<td>90,000</td>
<td>180,000</td>
</tr>
<tr>
<td>Library</td>
<td>-</td>
<td>120,000</td>
<td>240,000</td>
</tr>
<tr>
<td>Medical Research Centre</td>
<td>-</td>
<td>200,000</td>
<td>400,000</td>
</tr>
<tr>
<td>Arab Gulf States Inf. Doc. Centre</td>
<td>10,000,000</td>
<td>705,500</td>
<td>1,411,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.3 LIBRARIES/INFORMATION CENTRES - STAFF

In the comprehensive survey, 68 professionals and 264 non-professionals were listed in the questionnaire by the 50 institutions included in the survey.

**TABLE 11**

MANPOWER IN 50 LIBRARIES/INFORMATION CENTRES (1989)

<table>
<thead>
<tr>
<th>No. of Institutions</th>
<th>No. of Research workers</th>
<th>No. of professionals</th>
<th>No. of non-professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>735</td>
<td>68</td>
<td>264</td>
</tr>
</tbody>
</table>

It appeared from the interviews, according to 60% of the administrators, that the low prestige of the library profession does not encourage active and enthusiastic people to work in libraries/information centres.

The information workers were asked whether they were happy with their status; 90% said that they are not happy because their degree is considered of less value than degrees in other subjects. In addition, their information services and their role in the development process in the country, are not appreciated by the users. In the interviews, the research workers had the opportunity to discuss the problem, and commented that the information workers should have qualifications not only in librarianship, but also in other fields of knowledge, they should be able to communicate effectively with people who use their information services, and they lack foreign language ability and subject knowledge.

When the directors of the information centres were asked to whom they report, 68% said to the administrators and 30% said to the general directors of the parent organisation.
In Iraq, only prestigious people report to the minister or deputy minister.

<table>
<thead>
<tr>
<th>TABLE 12</th>
<th>THE RANK OF THE PERSON TO WHOM THE DIRECTOR OF THE LIBRARY/INFORMATION CENTRE REPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. completed in questionnaire</td>
<td>Yes</td>
</tr>
<tr>
<td>Minister</td>
<td>-</td>
</tr>
<tr>
<td>Deputy minister</td>
<td>-</td>
</tr>
<tr>
<td>General director</td>
<td>9</td>
</tr>
<tr>
<td>Administrator</td>
<td>21</td>
</tr>
</tbody>
</table>

The administrators were questioned concerning whether they hold meetings or panel discussions with the information centre's staff regarding the development of the information services. Only 40% of the administrators said they hold such meetings and panel discussions.

4.4 SOURCES OF INFORMATION

Sources of information are another vital factor for a library/information centre to be successful.

The research workers were asked whether there were enough sources of information to satisfy their needs. (The sources of information were not specified in the questionnaire.) According to 66%, they cannot find the sources they need in their organisation's library/information centre, 21% cannot find the sources they need in the library/information centre in their city and 13% said they cannot find sources of information in libraries/information centres in other parts of the
country, as shown in Table 13.

TABLE 13
SOURCES OF INFORMATION AVAILABILITY NEEDED BY RESEARCH WORKERS

<table>
<thead>
<tr>
<th>Available Sources</th>
<th>No. completed in questionnaire</th>
<th>Yes %</th>
<th>No %</th>
</tr>
</thead>
<tbody>
<tr>
<td>In your organisation's library/ information centre</td>
<td>8 24 20 66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library/information centre in your city</td>
<td>- 6 21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Library/information centre in other parts of the country</td>
<td>- 4 13</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In the interviews, the research workers mentioned that there is no co-ordinated national information system through which they can search the libraries/information centres in their city or in the whole country, i.e. no bibliographic control, no union lists, no computer links, etc.

The information workers were questioned as to whether they weed their collections of obsolete material; 90% said they cannot weed their collections, because the government rules hold them responsible for the material bought. Therefore, many libraries/information centres are facing problems of space. Out-of-date material can mislead the users, especially those who are not familiar with library procedures, or who do not know how to use a library/information centre properly.

When the information staff were asked where they order their material, 19% said that they order their material locally and 80% order their material from abroad, as shown
During the interviews, the information staff commented that this situation may discourage the publishing industry in Iraq.

The information workers were questioned as to whether they had a book-selection committee; 48% of the information staff said that they had and 50% said they did not. When the interviews took place, the information staff commented that most of selection and acquisition is left on the shoulders of the librarian/information worker, even if they have a book-selection committee, because in most cases, members of the committee are either busy or away, etc. In some cases, the librarian/information worker does not know what material is needed and so he/she orders material according to his/her own ability and knowledge. In other cases, he/she lacks the subject knowledge, or lacks the English language ability, thus in many cases effort, time and money are wasted.

4.5 COMMUNICATION FACILITIES

Communication facilities are at the heart of information flow and are a sign of a developed country.
The research workers were asked whether they had access to databases abroad; a majority of 93% said that they do not have such access. When they were questioned as to whether they use information technology in searching for their information needs, 97% said they do not use information technology; only 3% said 'yes'. The research workers were asked as to what communication facilities were available, if they need a piece of information urgently. In response, 7% said that they could use telephones, but 90% mentioned there were no telex or fax facilities available to users. When asking the information workers what communication facilities were available for providing information services and for acquiring their materials, 3% said they could use telephones and 24% could use telexes. No faxes or computers are available for their use, as shown in Table 15.

### TABLE 15
COMMUNICATION FACILITIES AVAILABLE FOR RESEARCH WORKERS AND INFORMATION STAFF IN SEARCHING, ACQUIRING AND PROVIDING SERVICES AND MATERIALS

<table>
<thead>
<tr>
<th>Communication Facilities</th>
<th>Research Workers</th>
<th>Information Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes %</td>
<td>No %</td>
</tr>
<tr>
<td>Telephones</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Telexes</td>
<td>-</td>
<td>27</td>
</tr>
<tr>
<td>Faxes</td>
<td>-</td>
<td>27</td>
</tr>
<tr>
<td>Computer links</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Twelve years ago, telexes and computer links were not used either for providing information, or for searching for information. Now 24% of the information staff have access to telexes and 3% of the research workers have access to computer links in finding their information needs. Though the percentage is low, it is a sign of change. When the interviews took place, the information workers had the
opportunity to comment that the objectives of libraries/information centres are to provide the information services needed by the users, and that these are vital to research and development of the country. Hence, communication facilities should be made easily available and highly accessible to the users, especially those involved in development plans in the country.

4.6 PUBLICITY FOR THE EXISTING INFORMATION SERVICES

Information services, just like any product, need effective publicity in order to make the users aware of them and to attract the users to come to the library/information centre and use them. The information workers were asked whether they publicise their existing information services, 43% said that they do publicise their information services on radio, television and newspapers, as shown in Table 16.

<table>
<thead>
<tr>
<th>Publicity Method</th>
<th>Respondents</th>
<th>Non-Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes %</td>
<td>No %</td>
</tr>
<tr>
<td>Radio</td>
<td>13 43</td>
<td>7 23</td>
</tr>
<tr>
<td>Television</td>
<td>13 43</td>
<td>5 16</td>
</tr>
<tr>
<td>Newspapers</td>
<td>13 43</td>
<td>9 30</td>
</tr>
</tbody>
</table>

Twelve years ago, no respondent said that they could publicise their information services on radio or television, only that they could publicise them via newspapers, exhibitions, lectures and seminars.
4.7 THE EXISTING INFORMATION SERVICES - USERS

The administrators were asked whether the information services were considered by the government as an integral part of the National Development Plans in the country. According to 66%, they are not, whilst 34% answered that they are included in the National Development Plans. The reason for this difference of opinion might be that the administrators who answered 'yes' did not understand the question. If the existing information services had been included in the National Development Plans of the country, they might have been improved as in other sectors, such as industry, agriculture, etc. When they were asked if information services were important to research work, 84% said that they are essential, as in Table 17.

### TABLE 17

**IMPORTANCE OF INFORMATION SERVICES TO RESEARCH WORK**

<table>
<thead>
<tr>
<th>Importance of information services</th>
<th>Administrators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes %</td>
</tr>
<tr>
<td>Important</td>
<td>-</td>
</tr>
<tr>
<td>Very important</td>
<td>-</td>
</tr>
<tr>
<td>Not important</td>
<td>-</td>
</tr>
<tr>
<td>Essential</td>
<td>25    84</td>
</tr>
<tr>
<td>Not essential</td>
<td>-</td>
</tr>
</tbody>
</table>

The research workers were questioned whether the existing information services were efficient, or inefficient; 66% said that they are not efficient and 30% said they are efficient, as shown in Table 18.
The research workers were questioned as to whether they had had any library training programme, or a course on how to use a library/information centre. In response, 67% answered that they had no library education. In the interviews, some users mentioned how they learned to use a library/information centre while they were studying abroad. The users were asked whether any translation services were offered to them. According to 90%, the answer was 'no'. They were also asked whether new journals/periodicals were circulated to them. Their responses are given in Table 19.

4.8 EXISTING INFORMATION SERVICES - EDUCATION SYSTEM

The administrators were asked whether the education system in the country develops the habit of information-seeking in
the students at all levels - school, college, technical institute and university. It was unanimously agreed that the education system is a major factor constraining development of the information services in the country. During the interviews, the administrators commented that the whole existing education system should be revised and modern teaching techniques must be applied. The information workers were questioned if the people in the country had developed the reading habit. Only 20% said 'yes' that the people had developed the reading habit and the majority (of 80%) answered 'no'. When they were asked what were the reasons for that, their answers were shown in Table 20.

<table>
<thead>
<tr>
<th>REASONS</th>
<th>INFORMATION</th>
<th>WORKERS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes %</td>
<td>No</td>
</tr>
<tr>
<td>Family background</td>
<td>26</td>
<td>4</td>
</tr>
<tr>
<td>Lack of education</td>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td>Lack of sources of information</td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td>Lack of income</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>Lack of understanding of the value of reading as a learning process</td>
<td>28</td>
<td>2</td>
</tr>
</tbody>
</table>

4.9 INTERNATIONAL ASSISTANCE IN THE INFORMATION FIELD

The administrators were asked whether they sought any international assistance in the information field to promote and develop the existing information services. The majority of 80% said 'yes', they were seeking international assistance in the field of information, whilst 20% were not seeking such aid. During the interviews, 80% of the administrators commented that international aid in the
information field is greatly needed to promote and develop the existing information services in the country and it leads to better international understanding.

4.10 CIRCULATION RECORDS

All users, when borrowing any item from a library/information centre, fill out a call slip. Collecting these call slips over a period of time, the information workers can study the activity of their library/information centre, as well as the reading habits of users or what sources the users read. The information workers were questioned whether they keep circulation records, 70% said 'yes' that they keep circulation records showing how many users come to the library/information centre and what sources are used by the users.

4.11 LIBRARY STANDARDS

The information workers were asked whether they follow any library/information centre standards. The majority of 76% said that they do. The cataloguing and classification schemes used were predominantly: DDC, UDC, AACR, LC, and Sears List. When the interviews took place, the information workers commented that the procedures they use represent old techniques and they want to be trained in new techniques which are suitable for bibliographic control, indexing and abstracting, union catalogues and union lists. They need techniques, they say, suitable for use with information technology which will come into Iraq in the near future.
CHAPTER FIVE

THE THEORETICAL BASIS FOR A NATIONAL GENERAL INFORMATION PROGRAMME IN IRAQ

5.1 INTRODUCTION

The results of the comprehensive survey carried out in Iraq in 1989, indicated that the existing information services in the country are inadequate and ineffective. They are not meeting the information needs of the users spread out in various parts of the country. They are not contributing to the development process and are not considered as an integral part of the National Development Plans in the country. Therefore, it is essential to build up a strong information network on national level as a basis for regional and international co-operation. The development of the information services should be included in the National Development Plans as an integral part, so that they can contribute to the development process in the country. In most developing countries, including Iraq, information services have not always been planned as a part of a co-ordinated national programme, therefore, there is an essential need for an overall plan for it.

To be able to plan for the provision of a good information network, we have to investigate and study our own situation at national, regional and international levels by carrying out pilot projects or surveys and the data collected could be considered as the basis of our planning. Rompas (1) states:

indeed, when designing a national plan for a library and information service, we should know the aim, direction, pattern and models and then formulate a plan. Planing is a process for
deciding courses of action which will have to be executed to achieve the final aims.

In view of the increasing role of science and technology in the economic and social development of the country, there is a pressing need to speed up the utilisation of research results in technology and to improve the transfer of new and adequate technology to industry. In order to broaden the basis of self-reliance in science and technology and to assist the further development of planning and management in government administration, research, industry, agriculture, public health, communication and other fields, further steps must be taken by the government in Iraq in the development of information services which should be able to meet the information requirements of the users especially those involved in research and development, in this age of information technology.

The lack of efficient and adequate library and information services has led to poor development plans and this, in turn, led to the failure of many important projects. Brown (2) states:

In view of the vital role which scientific and technical information has come to play in the development of nations, the Director-General of the United Nations Educational, Scientific and Cultural Organisation (Unesco) was authorised to undertake and to complete jointly with the International Council of Scientific Unions (ICSU) feasibility study on the establishment of a world science information system 'UNISIST' which had originally been conceived as a flexible and progressively evolving system for keeping abreast of the huge volume of increasingly complex scientific and technological information becoming available.

The main aim of the Unesco/ICSU joint project was the international deployment of the informational resources of science, Unesco (3).

The role of information as a resource in the development
process has been universally accepted. Many governments are establishing information policies so as to achieve better collections, storage, retrieval and dissemination of information and to make use of it. In the Unisist Feasibility Study Report (4), it has been stressed that information is:

an international resource, built painstakingly by scientists of all countries without regard to race, language, colour, religion or political persuasion. As it is built internationally, it is used internationally.

It has been widely realised that no information infrastructure, no country and even no region can achieve a position which is self-sufficient and self-efficiency in information management (collection, storage and retrieval of information), this reason has necessitated and resulted in various co-operative activities in the field of information management nationally, regionally and internationally through the establishment of information systems, the establishment of international information programmes and the establishment of international associations.

Bedjaoui (5) has mentioned that:

The United Nations is proposing a new world-wide legal, economic and political order, based on the integrated development of the whole people and their right to progress, in other words, 'fighting against inequality'.

On the same subject, Muya (6) stated:

the new economic order is designed to: correct inequalities, redress injustice, eliminate the widening gap between the developing countries and the developed, accelerate economic and social development and ensure peace.
Based on the foundation of the New International Economic Order, the new trend in the library and information world is establishing a New International Information Order. Great efforts, huge sums of money and long hours are required from the concerned countries all over the world in order to make this trend a successful one. Therefore, Unesco is trying to use and spread information activities internationally through its PGI programme and to study its importance and contribution to the development plans of all countries, particularly of Member States of Unesco. Sharif (7), talking of Arab Member States of Unesco, noted:

The discovery of oil is considered a turning point in the social and economic life of the region. Eight Arab states are the world's leading exporters of oil. The expansion of the development plans was as a result of the discovery of petroleum. Since 1970, rapid expansion of oil production and sharply rising oil prices have provided ample government revenues and foreign exchange resources for development, defence and aid to other Arab countries. Government projects have concentrated on the development of economic and social infrastructure, with the highest priorities being given to the extension and modernisation of the transportation and communications network, as well as the improvement and expansion of health, educational and social welfare facilities, the exploration and development of non-petroleum mineral and water resources and the upgrading of public administration have also been major concerns of the Arab States .... Professional librarianship has not yet become a reality in the region. There is no national programme of library development in any state. Not only is there a lack of public awareness about the importance of libraries and library services to support and assist the social, educational and economic progress of the country, but also there is a lack of appreciation and understanding by the authorities. For these reasons, there are few professional librarians in the Arab states.

Two most important Unesco seminars affecting the Arab
world, particularly in the area of introducing a general national and regional conceptual framework for the development of library and information services, were the Regional Seminar on Library Development in Arab-Speaking States, Beirut, 1959, and the Regional Seminar on Bibliography, Documentation and Exchange of Publications in Arabic-Speaking States, Cairo, 1962 (Parker) (8). Unesco has sponsored other meetings on the development of library and information services in the Arab world. The most important of these have been the Meeting of Experts on the National Planning of Documentation and Library Service in Arab Countries, Cairo, 1974, and the Meeting of Supervisors of Library and Documentation Schools in Arab Countries, Baghdad, 1978.

Regionally speaking, one can refer to the foundation, in 1970, of the Arab League Educational, Scientific and Culture Organisation (ALECSO) (9), whose Department of Documentation and Information aims to:

a. develop infrastructures of documents and information centres in the Arab countries;

b. provide bibliographical services, using modern technologies;

c. promote the capabilities of librarians, documentalists and archivists through training courses and meetings;

d. collect basic information on the Arab countries, particularly in the specialised subjects of ALECSO, and make this information known world-wide; and

e. promote the maintenance and restoration of Arabic manuscripts.
ALECSO convened a number of meetings for the people concerned with the library and information field. Its seminars of 1971, 1972 and 1973 are considered the first activity in the stimulation and promotion of developing library and information services in the Arab countries (10). ALECSO continuing activities are supported by meetings and seminars, among which is a regional seminar on the application of standards in information handling, organised jointly under contract by ALECSO and Unesco (11).

In Iraq, the practical results achieved as a response to Unesco's, ALECSO's and other aid-giving agencies activities can be witnessed in the establishment and/or promotion of information infrastructures. These have included conducting library training courses by the Central Library of Baghdad University starting from 1960, and ending with the establishment in 1970 of the Department of Librarianship in the Mustansiriya University, to shoulder the task of library education in the country. ALECSO has also contributed to the continuing education of Arab librarians and information workers by holding meetings dealing principally with the problems of cataloguing, classification and bibliographic control of Arabic materials.

Due to the contributions by the West and by and ALECSO to the world of library and information development, particularly Unesco's contribution to overall library and information development and the British contribution, the situation in developing countries is now changing. Havard-Williams (12) has noted:

There appears to be an increasing recognition among the governments of the developing countries, and also among their librarians, that real and lasting development could only be achieved, in the last analysis, on the basis of local efforts and determination, and that while foreign aid might still be welcome for the right kind of assistance at the right time and in the
right place, it could no longer be regarded as a universal panacea for all the problems of developing world.

This trend towards increased local self-sufficiency is to be welcomed. The library professionals and the library profession need recognition and self-respect not only on a national, but also on an international, scale because the progress of library development depends a great deal on the existence of a body of enthusiastic, dedicated professional librarians.

On the complexities of modern life throughout the world, Al-Dawalibi (13) said:

Nowadays, the complexities of modern life throughout the world require a quantity and variety of information beyond that ever conceived of in other eras. The scientific and technical progress has removed the borders between nations and accordingly has imposed on humanity two new concepts of understanding:

1. thinking and believing in the unity of the human family and the right for everyone to live prosperously ... without discrimination of race, nationality or religion.

2. approving the intellectuality of education no matter what its origin or aims are.

These two new concepts are forcing themselves on international community and its organisations whether they are political, economical, social or educational.

In 1974-75, the United Nations held two exceptional meetings to proclaim resolution (3201) as one of the principles of a new international economic order: giving to the developing countries access to the achievements of modern science and technology, and promoting the transfer of technology for the benefit of developing countries in
forms and in accordance with procedures which are suited to their economies. New solutions were needed for the modern human crisis and to secure the world peace in this time where every human being is threatened as a result of the massive technical advancement, especially in the area of destructive weapons and as a result of the lack of interpersonal deterrent evoked by spiritual education.

In December 1975, the United Nations General Assembly adopted a resolution (3507) on institutional arrangements in the field of transfer of technology. The resolution affirms the importance of wider dissemination of scientific and technological information and stresses the need for developing countries to have access to information on advanced and other technologies required by them as well as on the new uses of existing technology, new development, possibilities of adapting them to local needs, and the need to select technologies which meet their own requirements. Besides these previous affirmations (by the United Nations and by individuals) of the importance of information to development, one can detect this importance through substantial activities in the field of information. These activities include the design and establishment of information infrastructures; co-operation in information management and exchange; organising meetings on information practice and problems; forming professional bodies dealing primarily with the information field and investments in information.

The United Nations suggested that there was no hope in finding solutions to these crises and to secure world peace as long as the existing systems are in operation; therefore, they found that it was essential to find a new international human system or a new international economic order where all nations, religions and homelands are equal and have the right of a prosperous life without being used. Accordingly, two new ideas have been established in the
United Nations and its organisations:

a. The idea of discussion (dialogue) between the industrially advanced nations and the developing nations, particularly on economic affairs and on the basis of dignity and justice for all, and on the basis of preventing any economic imposition on planning any nation by other nations especially the poor ones if they are seeking world peace, and

b. The idea of calling for a new international system - a new international economic order.

We can see today that what the United Nations has achieved in this respect is extremely important; but it is essential that a new educational system should be established to go with the awaited new economical system because these new human ideas do not take place by announcements and declarations but by teaching our children the modern scientific international methods. These new concepts of understanding in the United Nations were the basis on which the New International Economic Order was based. On the same basis, Unesco established the General Information Programme (PGI).

In order to avoid duplication and ensure complementarity between existing information programmes, systems and services, and to further international information systems, Unesco General Conference, at its 19th session in November 1976 (14), decided to combine the two groups of activities of UNISIST and NATIS into one programme designated as the General Information Programme. The objectives of UNISIST and NATIS are not to be disrupted, but to be continued and promoted in a more co-ordinated way under the PGI.

The General Information Programme covers all the
organisation's activities relating to information, libraries, documentation and archives and it provides a general conceptual framework that can be applied to the whole range of knowledge and of world information resources, primarily scientific and technological information, along with economic, social, cultural, and managerial information as an essential but increasingly complex tool in the broad process of national development. Arutjunov (15) has stated:

Part of Unesco's General Information Programme, UNISIST provides a general conceptual framework that could be applied to the whole range of knowledge and of world information resources. Taking into account the need for a new international economic order, UNISIST is geared to a balanced global flow of information and to a flexible world co-operation of information systems.

and, as Wysocki (16) puts it, 'to better serve the Member States and Unesco aims'.

The General Information Programme's main objectives are formulated into five main themes:

1. Promotion of the formulation of information policies and plans at the national, regional and international level;

2. Promotion and dissemination of methods, norms and standards for information handling;

3. Contribution to the development of information infrastructures.

4. Development of specialised information systems in the field of education, culture and communication, and the natural and social sciences;
5. Promotion of the training and education of specialists in and user of information.

Wysocki (17) estimated that the PGI involves international co-operation among 144 Member States of Unesco and described it as:

the most broadly based programme in the field of information transfer.

The PGI can provide a number of different services to the information community - consultancy services, equipment, fellowships, as well as training courses and meetings. PGI works closely with a number of professional non-governmental organisations such as the International Council for Scientific Unions (ICSU), the World Federation of Engineering Organisation (WFEO), the International Organisation for Standardisation (ISO), the International Federation for Documentation (FID), the International Council on Archives (ICA) and the International Federation of Library Associations and Institutions (IFLA).

J. F. da Costa, General Secretary of the United Nations Conference on Science and Technology for Development (UNCSTD), speaking to the delegates at the Intergovernmental Conference on Scientific and Technological Information for Development (Unisist II) (18) emphasised Unesco's vital role in UNCSTD and the important contribution that Unisist II could make. He stressed three major developments that had occurred since Unisist I: the affirmation of a new international economic order based on justice and the correction of imbalances; the new orientation of the United Nations system toward development objectives; and the new broader conception of development itself that had emerged. He indicated that the characteristics in the development of the Unisist program the General Information Programme, would be the interfaces
between Unisist II and UNCTD.

One of PGI objectives is promotion of co-operation which could be between the developing countries themselves or between the developing countries and developed countries or between the developed countries. Perhaps the most important is more co-operation between the developing countries and developed countries so that the developing countries could make more use and learn from the experience, methods, standards and technology of the developed countries.

On a regional basis, co-operation could be established among the Arab States as they are similar geographically, they speak the same language (Arabic) and they have common economic, social and cultural problems which can offer a good basis for co-operation. In any case, we cannot co-operate with others unless we first organise and co-ordinate the infrastructures in each individual country.

Iraq has taken a very favourable view of the work of Unisist and Unesco, but, in order to be actively involved in their practical implementation, it is important that the existing information activities - the infrastructures - must be improved, co-ordinated and developed by setting up of an integrated national information system in the country. This must (1) handle and distribute within the country all information needed which is available locally and abroad; (2) channel to users of information abroad the rapidly growing scientific and technical information on Iraqi achievements and developments, because only then can scientific and technological and other fields research make its proper contribution to the country's economic and intellectual development. On the basis of data collected in a comprehensive survey carried out in 1989 in Iraq, covering all aspects of the existing information services and on the data collected throughout this study, the
proposed national information system must be based on the following guidelines for the development of library and information services in Iraq.

5.2 THE GUIDELINES FOR THE DEVELOPMENT OF LIBRARY AND INFORMATION SERVICES IN IRAQ ON WHICH THE PROPOSED NATIONAL INFORMATION SYSTEM SHOULD BE BASED IN THE CONCEPTUAL FRAMEWORK OF PGI

New measures must be taken within the conceptual framework of the General Information Programme in order to bring about a fundamental change in the provision of library and information services in Iraq. To implement this fundamental change, the following are strongly recommended:

5.2.1 Immediate and direct action and planning for the development of library and information services must be taken by the government within the overall national development plans. The commitment and determination of the government are essential.

5.2.2 Long-range plans are needed to study and analyse the size of population to be served, the educational level of this population, the social environment of this population; the information needs of various categories of users; the cost of the information services to be offered; the cost of the literature in the fields covered; the cost of application of new technologies, etc. In other words, to study, analyse and investigate the whole environment of the existing infrastructures. Some of these factors have been investigated and studied but not as co-ordinated efforts in the country.

5.2.3 An Act of Command Council should be passed by the
government to cover all information structures - libraries, documentation and archives centre in the country. This Act must be firmly and immediately implemented and should emphasise the following Articles:

5.2.3.1 Article 1: Development of a National Information Policy

The very problem of library and information services in Iraq lies in the absence of any sort of library and information policy. The PGI objectives stressed the need for promotion of national information policies. An information policy as an initial step towards finding solutions to Iraqi information problems is essential and should reflect the need of all sectors of the community. This policy should be established as an integral component of the national development policy because information as a resource has an indispensable role in the development of all policies of other sectors, e.g. education, economic, science and technology, etc.

The national information policy must be formulated and backed by appropriate legislation and its ultimate aim must be an informed society.

The specific details of a national information policy differ from one country to another simply because each country has its own national goals.

The goals of national information policy must be built on the goals and aims of the national development plans of the country. Therefore, in Iraq, we have to study and analyse the goals of the national development plans to identify the information implications of these goals and to be able to establish and plan the national information policy accordingly. The only practical solution to our problems
in library and information field is by integrated planning which means overall co-ordinated planning of all the units of the national information infrastructures, libraries, documentation and archives and incorporation of this planning into national development plans.

5.2.3.2 Article 2: Establishment of a Central Library and Information Co-ordinating Body

In Iraq, the establishment of a Central Library and Information Co-ordinating Body is a necessity, because there are a number of bodies with the responsibilities of provision of library and information services but with no co-ordination among them. Therefore, there is a need for the co-ordination of these services to avoid duplication and conflict in providing library and information services and to shoulder the responsibility of planning and co-ordinating these services. This body should be established at an appropriate governmental level with legislation, i.e. it should be closely linked with the Command Council and the Council for Planning in the country. This body should consist of:

a. a member of Command Council;
b. a member of Planning Council;
c. a minister, e.g. education, industry, agriculture, culture and information, etc.;
d. professionals;
e. users of information;
f. two experts;
g. a financial specialist

The co-ordinating body should make proposals to the government based on the study and analysis of the information needs. This requires research and development activities relating to the existing library and information
facilities within the country. The responsibility of this body can be outlined as follows:

a. to co-ordinate the library and information services in Iraq and promote their development;

b. promote and develop National Focal Points;

c. promote and develop National Bibliographical Control;

d. to establish and develop a national co-operative acquisition scheme for the coverage of foreign and local literature needed for the development plans in the country;

e. to establish a National Union Catalogue based upon the integration of the Regional Union Catalogue.

f. to establish a strong training institution:
1. to co-ordinate and develop the professional education and training programmes for the information specialist and the user of information, who range from decision-makers to grass-roots workers in local communities, with special emphasis on training programmes in the application and use of modern information technology; and
2. adequate teaching in English.

g. to establish and maintain data banks. The necessity is for up-to-date information technology and building up computer facilities within the country for providing the research workers with quick access to computerised data banks for current literature in special fields with international scope;

h. to promote and develop reprographic facilities for
copying of documents and distributing of information;

i. to maintain and develop relations and co-operation with foreign national information centres and other institutions providing sources of information, especially Iraqi, foreign and international professional organisations, associations, learned societies, etc.

j. to prepare and issue methodological guidelines and instructions and to control their application;

k. to advertise the library and information activities and their crucial role in the development plans of the country in the mass media, newspapers, radio, TV, magazines, national campaigns, etc.

5.2.3.3 Article 3: Provision of Library and Information Manpower

Qualified manpower is a basic factor in the success of any profession; therefore, provision of adequate number of professional qualified manpower based on a systematic manpower planning is a necessity in solving a part of library and information problem. The human resources are one of the major elements which comprise library and information services; they collect, organise the materials and retrieve the information needed by the users. Only the human element can bring library and information services to life and make them a dynamic, vital force for the community they serve. Adequate development of library and information services is mostly dependent upon the availability of qualified, efficient and capable personnel who can provide the professional leadership and services
necessary to plan and implement library and information programme.

In Iraq, lack of professionally qualified personnel is one of the major problems facing library and information services, so most library and information centres are staffed with insufficiently qualified personnel. To accelerate the development of library and information services, the responsible authorities should take the following steps:

a. to develop clearly a job description defining duties and responsibilities of all the posts in library and information services in order to put the right person in the right place;

b. to accord library and information personnel the status corresponding to the contribution of their profession to the educational, social, cultural and economic development of the country;

c. to ensure the supply of an adequate number of professionally qualified personnel by establishment of a strong training institution to provide professional education and training; professional education should be based on systematic programmes in theory and practice, and adequate teaching in English as most literature in the library and information profession is in English.

d. to recognise legally the work in the library and information field as a profession as that of other longer-established professions.

e. training programmes of familiarisation with the library and information services must be initiated, and training programmes of existing and future users
must be promoted;

f. the library and information programmes should be
designed in the light of present and future needs of
library and information services in Iraq;

g. postgraduate studies should be developed and faculty
members should be given spare time to do their
research.

5.2.3.4 Article 4: Standardisation

Standardisation is an important and effective factor in
evaluating the efficiency of library and information
services, in promoting their co-operation and co-ordination
and in reaching compatibility and uniformity in library and
information operations and services. Therefore, national
standards to fit local situations must be established and
developed. International standards could be adopted in
order to make use of the international information systems,
networks and programmes. Standardisation is now more
important than before because of the application of
sophisticated technology in libraries, information,
documentation and archives centres in developed countries
which it is hoped will be used in developing countries in
the near future.

In Iraq, to establish national standards adequate to the
present national possibilities and potentialities, allowing
for future development, it is essential to study and
analyse the existing library and information services;
their objectives and level and to study many international
standards, such as the American Library Association
Standards, the British Library Standards and other
international organisations standards, e.g. IFLA, FID,
UNESCO, etc., as useful aids to be taken into
consideration. The national standards should be legally endorsed and effectively implemented in order to achieve the goals for which these standards are established. The question is, are these standards used and practised effectively? The real situation of the existing information services shows the contrary.

5.2.3.5 Article 5: The Application of Information Technology

National science and technology information infrastructures should be developed so as to collect, process and disseminate information important to the country, whether such information has been generated inside or outside the country. We have to apply modern information technology to ensure speed and accuracy in library and information procedures and services; enforce better control on the rapid growth of and the increasing demand for information; and to enhance the country's participation in and benefit from international information systems and networks which almost all of them are computer-based at present.

In Iraq, the computer has been used in many sectors but not yet in library and information services and procedures; although there is a growing tendency among the management responsible and among the professionals toward the automation of library and information activities. Using information technology needs great efforts to plan, design and study all the aspects by all concerned parties; government, responsible people, professionals and users in order to make sure the kinds of systems which will be suitable for our purpose.

The automation of library and information activities and services are inevitable if we want to achieve an efficient flow of information inside and outside the country.
5.2.3.6 Article 6: The Education System

The existing traditional education system at all levels must be revised and changed. Students should be motivated to get interested in the subject matter. The value of information should be insisted upon and the habit of information-seeking should be developed in the students, the obsolete procedures of traditional educational programmes should not be applied. Great emphasis must be put on stimulating the reading habits and reading interests and on the use of assignment as part of teaching process where the students are encouraged to discover ideas and expand the limits of their thinking by themselves. This will help the students to use the library, which should have available material relevant to the needs of the educational programme. Thus, the library will become a truly integrated part of the learning process and the students will keep on practising the habit of using a library in their future career.

In Iraq, some planners and policy-makers do not know or understand the value of information because they have not experienced the value of information during their academic life; otherwise they would be more supportive and work for the development of library and information services in the country.

5.2.3.7 Article 7: The Library Education and the Training Programmes of the Information Workers and the End-Users

In Iraq, one serious problem of library and information services is that the majority, if not all, of users are unaware of the importance of the information services, especially of scientific and technical information. The users lack essential knowledge and skills to locate the
information sources. According to a comprehensive survey in 1989, 67% of users have not received user education training or any library training programme. User education instructions should start at an early age in schools at all levels - primary through university. User education instructions will widen and enrich the curriculum in a way that will help young people to prepare for the world of work and the use of skills and knowledge to solve the real world problems, which they meet at work and in adult life. They develop the skills and interests that will enable the students to lead a fuller life and be able to contribute more to the life of the community. Therefore, it is essential to develop a special course for the purpose of developing professional instructors in user education and in bibliographic instructions which are a great help to users in obtaining informational awareness, widening their knowledge, and cultivating more independent study abilities. This special course, or a strong instructional library training programme, could be initiated in all schools at all levels and at all universities in the country. There should be user education programmes for all concerned parties: research workers in all fields of research, technicians, decision-makers and planners, information workers from libraries, information and documentation and archives centres. The central theme of user education is that of creating awareness in an environment of information access and teaching basic skills for independent study through effectively using library resources. The universities and other educational institutions should include in their programmes instructions on 'how to use a library' and the information resources. At least, these programmes should be in the first year academic programme and short training programmes on library skills must be arranged to train the school teachers and school librarians.

Current awareness services must be promoted which keep the
scientists, engineers and research workers abreast of scientific and technological achievements. They should inform the user of the existence of newly published and available materials.

5.2.3.8 Article 8: Promotion of Book Production and Publishing

Library and information services and activities depend on a continuous supply of national materials and foreign literature. An adequate indigenous publishing industry can keep library and information services alive. The publishing industry in Iraq must be promoted to ensure the availability of materials to reach all members of the society. The government should provide the financial facilities needed for development of the publishing industry and should make the prices of publications in the reach of all the literates of various income levels. All elements of publishing industry must be studied and co-ordinated. Modern technology must be used, authors must be encouraged and motivated by awards, universities and other research organisations must stress creative and relevant research work. Concerned people must be sent abroad to expand their knowledge and learn the modern methods and techniques used in those countries, a course must be established on the publishing industry, and efficient means of distribution should be established under appropriate legal authority with the power and authority to control all the publishing industry in the country.

5.2.3.9 Article 9: The Iraqi Library Association

The Iraqi Library Association (ILA) should be established as a professional association that stands as the organised voice of the profession. ILA should be based on the
Library Association in the UK and American Library Association, taking into consideration the local situation, so that it can play its role in the development of library and information services and act as the organised official body of the profession. The ILA should be accorded a legal status which provides for official recognition by the government and leads to power and authority that enable it to play its rightful role effectively. The government should give full support and financial facilities to ILA in order to be able to carry out its role in the development of library and information services. The ILA should present the profession in a forceful way to the society it serves. It should co-ordinate the interests of its members and encourage them to raise the standard of the profession. The administration of ILA should be professionally competent and active, and its members should be provided some fringe benefits. It should have premises and should publish a journal. It should organise conferences, seminars, and it should publish adverts on its activities in the mass media. It should formulate policies, prepare development plans of library and information services and promote educational standards. The ILA should play its part in the development of regional and international relations and co-operation in the profession.

5.2.3.10 Article 10: Establishment of Effective Communication Facilities

Communication facilities are vital to research and development in the country. The communication facilities must be made easily available by government and highly accessible to users of the information services, especially those involved in the development process of the country. The limited communication facilities are a drawback and a constraint for the users and information workers in carrying out their work properly. The comprehensive survey
in 1989 indicated that 59% of the research workers said the communication facilities are not easily accessed locally and not at all abroad. A majority of 97% mentioned they do not use information technology and 93% said they do not have access to information databases abroad. Only 5% of information workers could use telephones and 24% telexes for providing information services to the users and in acquiring their materials. Therefore, a well-co-ordinated communication network must be established between all libraries and information, documentation and archive centres at a national level as the basis for regional and international activity. Library and information services are not only concerned with collection and organisation of materials, but also with making these materials readily available for use both inside and outside the country. A new policy must be adopted by the government covering all libraries and information, documentation and archive centres to encourage maximum use, rather than preservation of materials, and to help users to find these materials and have easy access to them. Efficient external borrowing of materials and inter-library loans must be easy, so that a user searching for a certain material is not lost when this material exists in another library somewhere in the country. Communication facilities, e.g. telephones, telexes, faxes, computers, etc., should be available in information centres. A strong network must be established between all these centres and the research institutions in order to prepare the right materials needed by the research workers to be used in carrying out their research projects.

5.2.3.11 Article 11: Establishment of a Research Centre for User Studies

It is essential that a research centre for user studies should be established to study the information needs of the
users, how much the lack of information services is affecting their research work, what services they really need, and why they need them. A multi-methods approach should be applied for studying these needs. This research centre should arrange psychological and sociological studies to try to study the bureaucracy feelings and attitudes of the users towards the information specialists and vice versa, and what are the users' feelings and behavioural reaction when the users cannot find the needed information while they are carrying out their research projects. The information needs of the whole community they serve should be studied and analysed as the basis for an integrated approach to the proposed national information system in the country.

5.2.3.12 Article 12: Assistance of Regional and International Organisations

There are many regional and international organisations which offer assistance to all countries who seek and need their assistance in the information field, e.g. UNESCO, IFLA, FID, ICA, AGRIS, ALECSO, etc. The main aim of these organisations is to promote understanding among nations, assist countries to develop their national library and information services, and to promote international transfer and exchange of information. These organisations act on requests of individual countries. Each of these organisations had contributed to the development of library and information services, documentation and archives services of the developing countries through their educational, scientific and technical development programmes; therefore Iraq in order to promote and develop the existing library and information services - the infrastructures - should seek the assistance of these international organisations, but first its information needs should be identified and then should be investigated.
about the possibilities available to meet these needs.

Most of these organisations advise and recommend and the follow-up work lies in the hands of assistance-seeking countries. This can raise problems; for example,

a. These organisations should not leave the follow-up work entirely in the hands of assistance-seeking countries because the majority, if not all, of developing countries lack order and have the tendency to leave what must be done today until tomorrow, their thinking capacity is narrow, they do not trust the national professionals and do not appreciate their work, but they think foreign experts are superior; this feeling goes back to the colonial times and its effects have lasted to the present day.

b. The technical assistance and expertise supplied to developing countries should be compatible with the present situation of each country.

c. These organisations should make sure that delegates who are attending their educational training programmes should be qualified and capable and should make this point very clear to the assistance-seeking countries' governments to abide by it.

d. Professionals should attend the regional and international conferences and seminars on the development of library and information services in order to benefit from the new issues in the library and information profession to provide better information services in the country; unprofessional people should not be accepted to attend these educational programmes to put an end to the present situation in Iraq where people are chosen in most cases on personal relations or other reasons.

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e. The experts who are sent to assistance-seeking countries for planning purposes and for advising on their specific problems should have enough knowledge of the background of these countries.

This Act and its contents must be implemented in Iraq by the government authorities and other concerned parties within the conceptual framework of the PGI programme. The existing information infrastructure on which the proposed national information system is based will be strengthened and co-ordinated. It will enable the country to maximise the use of all relevant information essential for the development plans of the country at national, regional and international levels, and to make full use of the PGI programme's objectives, which is concerned with co-operation among all nations and free access to all information wherever it exists and in any parts of the world.


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CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS FOR FURTHER STUDIES

6.1 SUMMARY

It is widely recognised by national, regional and international professional organisations that information has become a national and international resource essential for the socio-economic development of individuals and society at large of any country. Library, documentation and archives infrastructures are indispensable sources of information. This is a fact in the developed countries where large and immense sums are spent on the establishment and maintenance of advanced library and information services where sophisticated technology has been applied; the large number of manpower engaged in the generation, organisation and dissemination of information; the great number of facilities for supplying professionally qualified library and information manpower; the national, regional and international organisations and associations working in co-operative ventures in the provision and exchange of information and dealing with library and information practices and problems. All these activities are a clear evidence of the value of information, and the necessity for its maximum acquisition and utilisation for the development of the nations worldwide.

Developing countries, of which Iraq is one, are undergoing a development process which, itself, forms a force that develops demand for information services/libraries, documentation and archives centres. The availability, organisation and utilisation of information is essential for their progress. The only way to meet this is by

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ensuring the availability of efficient infrastructures that perform the functions of collecting, organising and retrieving information on a nationwide basis to ensure that all citizens of the country get access to the information they need.

In the developing countries, which are struggling for their progress and which are trying to educate and inform their populations to promote economic and social developing, information has become an essential component for the progress of their social, cultural, educational, scientific and economic activities. Although libraries and information services in these countries are deficient, now some of their governments are realising the essential role of information in the developing process. This realisation is very important because it will induce these countries to try hard to solve and overcome the information problems facing them.

The library and information services are created by the society within which they operate and thus they reflect that environment in their aims and functions. Therefore, to form a true background for understanding the nature of these services, it is necessary that we understand the environment in which they operate. Consequently, the Iraqi major features including area, population, history and government, economy, education, book production and publishing, research activities, and libraries and information centres and services have been discussed. An attempt has been made to give a general background of the development of libraries in the country. The Summarian, Babylonian and Assyrian civilisation grew and flourished in Iraq where the great libraries of antiquity existed. Since 1258, Iraq has undergone many different foreign occupations until it became independent in 1932. These occupations have deeply affected the cultural, educational, social and economic situation of the country. This has resulted in a

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rapid expansion of free educational institutions at all levels, establishment of various industrial, agricultural and commercial enterprises; the enhancement of research and development capacities. These achievements have created a demand for information services and a force for the development of library and information services.

The results and analysis of a comprehensive survey carried out in Iraq in 1989 indicated that the library and information services are generally inefficient, inadequate and play a minor role in the national development process in the country; therefore they need to be improved and developed in order to reach their development objectives.

Iraq, which is struggling for its own development in order to make use of the international information systems, networks and programmes such as General Information Programme objectives, should give high priority to the development of library and information infrastructures fully supported by the government, and should establish a central Library and Information Co-ordinating Body for information to organise, control and co-ordinate the existing information services and to offer new services. Also, it should establish focal points for information in different fields in all parts of the country and link them with a strong network by providing easy communication facilities. In doing so, Iraq can have access to information existing inside the country and information from abroad, and it can use this information in the development programmes in the country.

The present study has led to suggested guidelines for the development of library and information services on which the proposed national information system should be based in the conceptual framework of the General Information Programme in order to bring about a fundamental change in the provision of library and information services. The
commitment and determination of the government are essential.

1. Immediate and direct action and planning for the development of library and information services must be taken by the government within the overall national development plans.

2. Long-range plans are needed to study and analyse the size of population to be served.

3. An Act of Command Council should be passed by the government to cover all information infrastructures of libraries, documentation and archives centres in the country. This Act should include the following Articles:

   1. Development of a National Information policy.

   2. Establishment of a Central Library and Information Co-ordination Body.

   3. Provision of Library and Information Manpower.

   4. Standardisation.

   5. Application of Information Technology.

   6. The Education System.

   7. User Education Programmes - Information awareness and use.


10. Establishment of Effective Communication Facilities.

11. Establishment of a Research Centre for User Studies.

12. Assistance of Regional and International Organisations.

6.2 CONCLUSION

In developing countries including Iraq, information is a vital factor in improving the productivity, but lacks the support and recognition of the government authorities - the decision-makers, planners, etc. This is witnessed by the data collected in the comprehensive survey, the literature review and the data collected in this study. The administrators, research workers and information workers emphasised the importance of information services in achieving the aims of the National Development Plans in the country. They also emphasised that the existing information services are inefficient and inadequate and contribute very little to the development process of the country. The existing information services compared to twelve years ago have changed only a little. Therefore, they need to be improved and developed. Government support, commitment and determination are essential. The guidelines recommended for the development of library and information services in Iraq will serve as a guide to decision-makers, the planners and the concerned authorities in the government to include the information services in the National Development Plans to assess the socio-economic, educational and scientific and technological developing in the country.
6.3 RECOMMENDATIONS FOR FURTHER STUDIES

This study suggests the following issues which need further investigation and study:

1. Formulation of a sound national library and information policy as an integral component of the national development policy.

2. Establishment of uniform subject headings for Arab works and its value for the development of library and information services in Arab countries.

3. Developing professional education and training programmes based on the analysis of the existing manpower resources.

4. An investigation into children's libraries and their effects on individuals in developing information-seeking habits in the country.

5. Application of appropriate modern technology needed for the country and the resources required to bring this technology into efficient operation.

6. Standardisation of library and information services with special reference to the pressing need of Arabisation Standards.

7. An investigation of the pressing need of Arabisation Terminology Control in Arab countries.

8. Publishing industry in Iraq and its impact on library and information services development.

9. The factors that restrain the use of information as an essential component in the individual's and society's
development.

10. An in-depth study of the public and official attitudes towards the provision of library and information services.

11. Participation of the country in international provision and exchange of information and its impact on library, documentation and archives development.

12. Investigating the role of public libraries in the rural areas.
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IFLA International Office for UBC.


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APPENDIX I

The questionnaires, schedule for interviews, a list of the selected organisations, libraries/information centres, 1989 (in English and Arabic)
Dear Sir,

I am updating my research project for a PhD degree at the Department of Library and Information Studies, University of Technology, Loughborough, UK.

This project investigates the present situation of information services (libraries, documentation and archives) in Iraq, their deficiencies, and the possibility of establishing guidelines for their development within the conceptual framework of the General Information Programme (PGI) of Unesco, as an integral component of national development plans in the country.

Therefore, in order to determine the scope of the problem, I need to collect as much data as possible. I would appreciate the opportunity of interviewing you while I am in Baghdad during the month of December, 1989. Also, I would be grateful if you would allow me to interview one of your research workers and the director/librarian of your information centre on the day of our meeting.

I enclose a short questionnaire which is in three parts:

Part I to be completed by yourself
Part II to be completed by a research worker
Part III to be completed by the director/librarian

It would be helpful if they could be completed before the interviews. If you have any difficulties with the questionnaire, I will be happy to discuss them at the interview.

Thanking you for your co-operation and assistance.

Yours faithfully,

Victoria Y. Zado
حضرة الاستاذ

أقوم حالياً بتحديد وتعديل مشروع بحثي لأطروحة الدكتوراه في قسم المكتبات ودراسات المعلومات

جامعة ليفربول، بريطانيا

بحث هذا المشروع في الوضع الراهن لخدمات المعلومات (مكتبات، تصنيف، أرشيف) في العراق،
وكذلك ببحث في مواقع النقص والعجز بها، ومكانية عمل وسائل تطويرها ضمن الأطار المفهوم لبرنامج
المعلومات العام الذي وضعته هيئة اليونيسكو، وذلك كخطط متكامل لخطط التنمية الوطنية في البلاد.

لذا، وكي اتمكن من تقرير وتحديد هذه المشكلات، احتاج لتجميع أكبر كمية ممكنة من المعلومات،
والذى ساكن شاكرة لكم جزيل الشكر أنتموا من مساعدتكم خلال زياراتي لمكتباتكم خلال شهر كانون الأول
1989. كذلك ساقدر لكم تمام التقدير أن سئحت الفرصة لي بمثابة أحد العاملين في البحوث لدىكم,
ومدير أو أخصائي المكتبات المسؤولة عن مركزكم للمعلومات، يوم مقابلتي لحضرتكم.

تجدون حضرتكم طيبًا استفسارًا موجهًا من ثلاثة أقسام:

القسم الأول:

يتم إكماله من قبل مساعدةكم فضلاً

القسم الثاني:

يتم إكماله من قبل العامل في البحوث

القسم الثالث:

يتم إكماله من قبل المدير أو المسؤول عن المكتبة

أو مركز المعلومات

سيكون من المفيد ان توجهتم بأعمال الاستفسار قبل المقابلة، وإن واجهتم في الاستفسار أي نقضات
غير واضحة، فسيستعيني مباحثتكم مع حضرتكم خلال المقابلة.

شكرًا لكم حسن تعاونكم ومساعدةكم.

المحمولة

تيموريا بوسليغ زادو

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1. How many of the information centre's staff are:
   - professionals
   - non-professionals
   No. ______
   No. ______

2. Would you consider that the centre
   - is under-staffed
   - has adequate staff
   Y/N
   Y/N

3. How many research-workers are there in your organisation?
   No. ______

4. a. What is the budget of your organisation?
   b. What is the budget of your information centre?
   ID. ______
   ID. ______

5. Is information considered as an integral part of the National Development Plans in the country?
   Y/N

6. Do you think that planners and decision-makers in the government are aware of the role that information play in National Development Plans of the country?
   Y/N

7. In your organisation, what is the rank of the person to whom the director of information centre reports?
   - minister
   - deputy minister
   - general director
   - administrator
   Y/N
   Y/N
   Y/N
   Y/N

8. How important do you think information services are to research work?
   - important
   - very important
   - not important
   - essential
   - not essential
   Y/N
   Y/N
   Y/N
   Y/N
   Y/N

9. Do you hold meetings, panel discussions with the information centre staff regarding the development of the information services?
   Y/N
10. Are you satisfied with the publishing industry in the country? Y/N

If No, is it because of:
- use of old techniques Y/N
- bad quality Y/N
- scarcity Y/N
- few information centres buying locally published material Y/N
- people have no reading-habit Y/N

11. Does the education system in the country develop the habit of information-seeking in the students? Y/N

12. Do you seek the assistance of the international organisations in the information field? Y/N
الجزء الأول

الإداريون

1. كم بلغ عدد:
   - الموظفين: ________
   - غير الموظفين: ________
   فمهم مركزك للمعلومات؟

2. هل تعتبر مركزك للمعلومات:
   - نعم
   - لا

3. كم بلغ عدد الباحثين في موسمكم؟

4. (أ) كم تبلغ الميزانية المخصصة لموسمكم؟
   (ب) "مركز المعلومات في موسمكم؟
   - نعم
   - لا

5. هل تعتبر أن المعلومات تعتبر جزءًا منا لخطط التنمية الوطنية
   - نعم
   - لا

6. هل تعتبر أن المخططين ومنامي القرار في الحكومة يعون أهمية
   دور المعلومات في خطة التنمية الوطنية في الدولة؟
   - نعم
   - لا

7. ما هي في تقديرك أهمية خدمات المعلومات للباحث (للبحوث)؟
   - غير مهمة
   - مهمة
   - في غاية الأهمية
   - أساسية
   - غير أساسية

8. هل يتم عقد اجتماعات أو حوارات أو ندوات أو ندوات أو ندوات مع الجهاز العام
   في مركزك للمعلومات بمد تطوير وتنمية خدمات المعلومات؟
   - نعم
   - لا

9. هل انتسبت (ب القطاع) النشر في الدولة؟
10. هل كان الجواب لا:
    هل تعتقد أن هذا بسبب:
    - استخدام التقنيات القديمة
    - النوعية غير جيدة
    - ندرته

11. هل تعتقد أن نظام التعليم في الدولة يقوم بتنمية ملزمة تقسيم
    المعلومات لدى الطلبة؟
    - نعم
    - لا

12. هل تتوقع مساهمة من المنظمات والمؤسسات الدولية في مجال
    المعلومات؟
    - نعم
    - لا
PART II

RESEARCH-WORKER

1. Are the information services you use:
   - efficient Y/N
   - inefficient Y/N

2. Does the lack of information services affect your research work while the work is in the process? Y/N

3. Do you think that information services are essential for research work? Y/N

4. Are there enough sources of information available that you need for your research-work?
   - in your organisation's information centre Y/N
   - information centres in your city Y/N
   - information centres in other parts of the country Y/N

5. What communication facilities are available, if you need a piece of information?
   - telephones Y/N
   - telexes Y/N
   - faxes Y/N
   - computer links Y/N

6. Are the communication facilities easily accessed by the research-workers?
   - locally Y/N
   - abroad Y/N

7. Are you informed about new material in your information centre? Y/N

8. Are the new journals/periodicals circulated to you:
   - daily Y/N
   - weekly Y/N
   - bi-weekly Y/N
   - monthly Y/N
   - bi-monthly Y/N

9. Do you have access to information data-bases abroad? Y/N

10. Is information technology used in acquiring your information needs? Y/N
11. Have you had any course/training programme in how to use an information centre? Y/N

12. Can you find the information you need urgently for your research work? Y/N
الجزء الثاني

الباحثون

1 - هل تعتقدون أن خصائص المعلومات المستخدمة من قبلكم:
- فعالة
- غير فعالة
2 - هل تعتقدون أن شعف حلقات المعلومات يؤثر على البحث أثناء عمله؟
3 - هل تعتقدون أن خصائص المعلومات اساسية في أعمال البحث؟
4 - هل توفر لكم مصادر معلومات كافية لاحتياجات بحوثكم؟
5 - ما هي وسائل الاتصال المتوفزة لكم ان احتاجتهم لبعض المعلومات:
- الهاتف
- التلفكس
- البيتالي
- الفاكس
- أنظمة الكمبيوتر
6 - هل توفر وسائل الاتصال تسهلية للباحثين:
- محلية
- إلى الخارج
7 - هل يتم إعلامكم بالمواد الجديدة في مركزكم للمعلومات؟
8 - هل يتم إرسال المجلات والنشرات الدورية الجديدة لكم:
- يوبيجا
- أسبوعية
- أسبوعية
- شهرية
- شهرية
9 - هل يتوفر لكم مدخلًا لأسس المعلومات (قواعد المعلومات) في الخارج؟
10 - هل يتم استخدام تقنيات المعلومات للحصول على احتياجاتهم منها؟
11 - هل خصصتم لأي دورات أو برنامجا تدريبيا في كيفية استخدام مركز المعلومات؟
12 - هل تتكون من إيجاد المعلومات العاجلة التي تحتاجون إليها فـ؟
PART III

1. What is the budget of your information centre? ID._____

2. What is the number of your readers? No._____

3. How many:
   - professionals No._____
   - non-professionals No._____
are working in your information centre? No._____

4. Are you happy with your status? Y/N

5. Are your information services appreciated by your users, if any? Y/N

6. Do you practice inter-library loan system? Y/N

7. How many readers have you served in the last week? Y/N

8. Is there any coordination in the information work in the country? Y/N

9. Do you think that people have reading-habit in the country? Y/N

If No:

10. Do you think the reason is:
    - family background Y/N
    - lack of education Y/N
    - lack of sources of information Y/N
    - lack of income Y/N
    - lack of understanding the value of reading as a learning process Y/N

11. Do you offer any translation services if needed by your users? Y/N

12. Do you follow any library standards? Y/N

13. Do you think that library standardisation is important/essential in improving information services? Y/N

14. Do you weed your collection of obsolete material? Y/N

15. Do you make your users aware of the new titles in your information centre? Y/N
16. Do you circulate new journals/periodicals to your users? Y/N

17. Where from do you order your material:
   - locally? Y/N
   - abroad? Y/N

18. Do you keep circulation records? Y/N
   If yes,

19. Do circulation records show how many readers come to the information centre every day? Y/N

20. What cataloguing and classification schemes do you use? Y/N

21. What communication facilities are available in your information centre for acquiring your materials?
   - telephones Y/N
   - telexes Y/N
   - faxes Y/N

22. Do you publicise your information services? Y/N

23. Do you have a book-selection committee? Y/N
الجـزء الثالث

 إختيارات المعلومات / أمان المكتبات

1 - كم تمثل ميزانية مركزكم للمعلومات؟
2 - كم يبلغ عدد قوانك؟
3 - كم يبلغ عدد:
   - الموهوبين
   - غير الموهوبين

في مركزكم للمعلومات؟

4 - هل انتتم راكون بوضعكم العامة (منزلكم ، مكتبكم)؟

5 - في حال وجود مستخدمون لمركزكم للمعلومات ، هل يقترون الخدمات المتواذنة في المركز؟

6 - هل تتبعون نظام الأعارة مع المكتبات والمراكز الأخرى؟

7 - كم بلغ عدد القراء الذي قام المركز بخدمتهم خلال الأسبوع الماضي؟

8 - هل يوجد تنسيق في مجال المعلومات على مستوى الدولة؟

9 - هل تعتقد أن الناس يملكون خطة (مومة) القراءة في الدولة؟

ان كان الجواب لا:

10 - هل تعتقد أن ذلك بسبب:

- الخلفية العائلية
- ضعف (نصي) التعليم
- ضعف (قيلة) مصادر المعلومات
- ضعف (قيلة) الدخل
- ضعف (عدم) تفهم قيمة الإطلاع والقراءة
- كعملية تعلم

11 - هل توفر خدمة الترجمة لمستخدمي مركزكم أن تم الاحتياج لها؟

12 - هل تتبعون مقيايسا مدينة للمكتبات ومركز المعلومات؟

13 - هل تعتقد أن مقاييس المكتبات ومراكز المعلومات ضرورة أساسية في تحسين خدمة المعلومات؟

14 - هل تقومون برفع وإزالة المواد القديمة أو المنتهية قيمتها من مجموعكم المكتبة / مركزكم للمعلومات؟
15 - هل تقومون بتوزيع مستخدمي مركزكم وإعلامهم بالجديد من المواد في مركزكم؟
16 - هل يتم تداول المجلات والنشرات الدولية بين مستخدمي مركزكم؟
17 - هل تقومون بطلب موادكم :
   - محليا
   - من الخارج
18 - هل تحتفظون بسجل للإعارة؟
19 - هل توضح هذه المجلات عدد القراء الذين يستخدمون مركزكم يوميا؟
20 - ما هي أنظمة التصفيف والفهرسة التي تستخدمونها؟

21 - ما هي وسائل الاتصالات المتاحة في مركزكم للحصول على المواد:
   - الهاتف
   - التلفزيون
   - الإنترنت
   - رسالة
22 - هل تقومون بنشر ودعم خدمات المعلومات التي تقدمونها في أي وسيلة إعلامية؟
23 - هل لديك لجنة لاختيار الكتب؟
Schedule for Interviews

1. Are there enough funds available to spend on information services?

2. What difficulties do you face in running your information centre?

3. Are there enough reference sources available?

4. What information services are provided by your information centre?

5. What difficulties do you face in finding your information needs?

6. What communication facilities are available for your use: locally and abroad?

7. What about the morale in which you are carrying out your research work, is it suitable?

8. Are information services essential/unessential for the National Development Plans in the country?

9. If yes, do you think they should be developed and should be included in these plans?

10. Do you have any chart or directory of your organisation showing where does your information centre stand?
<table>
<thead>
<tr>
<th>رقم</th>
<th>السؤال</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>هل يتوفـر لديكم ما يكفي من الأموال للانفاق على خدمات المعلومات؟</td>
</tr>
<tr>
<td>2</td>
<td>ما هي المشكلات التي تواجهكم في إدارة مركزكم للمعلومات؟</td>
</tr>
<tr>
<td>3</td>
<td>هل يتوفـر لديكم ما يكفي من مصادر المراجع؟</td>
</tr>
<tr>
<td>4</td>
<td>ما هي خدمات المعلومات التي توفرها مركزكم؟</td>
</tr>
<tr>
<td>5</td>
<td>ما هي الصعوبات التي تواجهكم في ايجاد احتياجاتكم من المعلومات؟</td>
</tr>
<tr>
<td>6</td>
<td>ما هي وسائل الاتصالات المتوفـرة لكم محليا ودوليا؟</td>
</tr>
<tr>
<td>7</td>
<td>هل المحيط الذي تقوم باعمال البحث فيه مناسب؟</td>
</tr>
<tr>
<td>8</td>
<td>هل تعتقد ان خدمات المعلومات اساسـية/ام غير اساسية لخطـط التنمية الوطنية في البلاد؟</td>
</tr>
<tr>
<td>9</td>
<td>ان كان الجواب نعم ، هل تعتقد بوجوب تطويرها وتضمينها في هذه الخطـط؟</td>
</tr>
<tr>
<td>10</td>
<td>هل لديكم أي جداول او مخططات او دليل ليهتمكم توضـح موقع مركزكم للمعلومات فيه؟</td>
</tr>
</tbody>
</table>
A List of the approached Organisations,
Information Centres/Libraries

1. Ministry of Planning
2. " " " - Central Statistical Organisation
3. Iraqi Museum Library
4. University of Baghdad
5. " " " - Medical Research Centre
6. " " " - College of Science
7. " " " - Economic & Administrative Research Centre
8. " " " - College of Arts
9. " " " - Medicine
10. " " " - Engineering
11. " " " - The Centre for Educational and Psychological Research
12. " " " - Central Library
13. Ministry of Higher Education & Scientific Research:
14. The Council for Scientific Research
15. " " " " " - Building Research Centre
16. " " " " " - Dates & Palm Res. Centre
17. " " " " " - Biological Res. Centre
18. " " " " " - Institute of Applied Res. & Natural Resources
19. " " " " " - Petroleum Research Centre
20. " " " " " - Agricultural Res. Centre
21. " " " " " - Astronomical Observatory
22. " " " " " - The Iraqi Scientific Documentation Centre
23. Foundation of Technical Institutes

24. The Arab Child Public Library

26. " " " - Dept. of Statistics
27. " " " - Dept. of Documentation & Studies
28. " " " - Dept. of Educational Planning

29. Ministry of Culture and Information

30. The Arab Regional Branch of the International Council on Archives

31. Ministry of Oil

32. Ministry of Agriculture
33. " " " - Agricultural Research Centre

34. Ministry of Industry & Minerals
35. " " " - The Specialised Institute for Engineering Industries

36. National Centre for Consultancy and Management Development

37. Director General of the National Library

38. The Iraqi Academy Library

39. Director General of the National Centre of Archives

40. Ministry of Al-Awqaf
41. " " " - Directorate of Public Libraries

42. Al-Mustansiriya University
43. " " " - Central Library
44. " " " - School of Library Science

45. The Iraqi Library Association

46. The Gulf States Information Documentation Centre

47. The Arab Archivist Institute
48. The British Council Library
49. The United Nations Information Centre
50. Sulaimaniya University - North East
51. Mosul University - North
52. Basrah University - South
53. University of Technology
54. " " " - Central Library
قائمة باسما المواعيد، مراكز المعلومات والمكتبات التي تم الاتصال بها

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<td>7</td>
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<td>8</td>
<td>كلية الآداب</td>
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<td>مناطق</td>
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APPENDIX II

The results and analysis of the Pilot Survey, 1978
3.3 Results and Analysis of the Pilot Survey (1978)

A survey - field study - was planned to investigate the information problem of the research-workers in the country. In order to determine the exact nature of the problem, data must be collected from as many sources as possible, therefore, both questionnaire and personal interviews were used, Ford (18) states:

A combination of methods is often more appropriate in order to make use of their different advantages and to counter the individual weaknesses and biases of a method used in isolation.

When reporting the results, the candidate did her best to be unbiased, Line (19) states:

We should avoid bias in interpretation or reporting of results. Complete openness of mind is almost non-existent, the most that can be hoped for is that any commitment should be provisional and subject to revision in the light of new fact.

Keeping in mind Line's statement the results of the field study are reported as follows:

3.3.1 Response Rate

Response to the questionnaire and interviews was satisfactory. Out of 22 organisations approached, 20 responded to the question-
naire and request for interviews. Eighty researchers, information specialist/librarians and administrators in scientific organisations were selected, but only 60 respondents were approached.

52 of the questionnaires were completed and 41 personal interviews were carried out. The response rate in the questionnaires survey was 87% and for the interviews 68%, as shown in the table below:

<table>
<thead>
<tr>
<th>Respondent Group</th>
<th>Number approached</th>
<th>Number completee Quest. %</th>
<th>Interv. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrators</td>
<td>20</td>
<td>17 85</td>
<td>15 75</td>
</tr>
<tr>
<td>Res. Workers</td>
<td>20</td>
<td>19 95</td>
<td>18 90</td>
</tr>
<tr>
<td>Inform. specialists</td>
<td>20</td>
<td>16 80</td>
<td>8 40</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>52 87</td>
<td>41 68</td>
</tr>
</tbody>
</table>

3.3.2 Employment in and Expenditure on Research and Development

The administrators were asked how many people were employed in research and development and also how much they spend on R&D.

An estimate of the number of potential users is essential to the design of an appropriate system. It gives some idea of the number of people not using the existing information services. Only five institutions responded in full to this question.
Text cut off in original
Table below illustrates the number of people employed and the budget spent on R&D.

Table 6: shows expenditure on R&D and the number of people employed in research

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Number of people</th>
<th>Amount ID</th>
<th>Amount $</th>
</tr>
</thead>
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<tr>
<td>Building Res. Centre</td>
<td>27</td>
<td>120000</td>
<td>360,00</td>
</tr>
<tr>
<td>Palm &amp; Dates Res. Centre</td>
<td>31</td>
<td>75000</td>
<td>225,00</td>
</tr>
<tr>
<td>Agricultural Res. Centre</td>
<td>38</td>
<td>80000</td>
<td>240,00</td>
</tr>
<tr>
<td>Direc. General of Soc. Welfare</td>
<td>10</td>
<td>19000</td>
<td>57,00</td>
</tr>
<tr>
<td>Medical Res. Centre</td>
<td>30</td>
<td>80000</td>
<td>240,00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>136</strong></td>
<td><strong>372000</strong></td>
<td><strong>1,122,00</strong></td>
</tr>
</tbody>
</table>

3,3,3 Finance

The respondents were questioned about the size of their budgets or the amount of expenditure on information services, and by whom the unit is supported. The budget is crucial in designing information services. The respondents were also asked if their unit had a separate budget. Both administrators and information specialists were asked about financial matters in order to see whether their answers were consistent. In many cases, the administrators said that there were no financial problems whereas the information specialists complained that shortage of money prevented them from establishing new services or buying equipment.
Table 7: Shows the budget of 10 information units

<table>
<thead>
<tr>
<th>Institution</th>
<th>Amount 10</th>
<th>Amount $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific Doc. Centre</td>
<td>10,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Industrial Informa. &amp; Doc. Centre</td>
<td>7,000</td>
<td>210,000</td>
</tr>
<tr>
<td>The National Centre for Consul.&amp; Manage.</td>
<td>20,000</td>
<td>60,000</td>
</tr>
<tr>
<td>D. G. of Scientific Welfare</td>
<td>7,000</td>
<td>210,000</td>
</tr>
<tr>
<td>Central Library - Univ. Baghdad</td>
<td>40,000</td>
<td>120,000</td>
</tr>
<tr>
<td>Central Library - Mustansiriya Univ.</td>
<td>50,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Central Library - Univ. Technology</td>
<td>50,000</td>
<td>150,000</td>
</tr>
<tr>
<td>College of Science Library - Univ. Baghdad</td>
<td>30,000</td>
<td>90,000</td>
</tr>
<tr>
<td>Ministry of Oil Library</td>
<td>5,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Ministry of Agriculture - Library</td>
<td>10,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Total</td>
<td>44,500</td>
<td>1,335,000</td>
</tr>
</tbody>
</table>

Further comments of finance by respondents

When the interviews took place, administrators in most cases asserted that there were no financial problems but researchers complained of the lack of services, lack of new material on recent developments in science and technology abroad and lack of photocopying services etc. Information specialists complained that they were under staffed, had inadequate equipment, and communication facilities, and were short of space, etc. Some libraries/information units did not have a separate budget from that of the parent organisation. This meant that their expenditure had to be agreed before hand by the appropriate authority. According to the information specialist, most requests and suggestions put forward by information specialists were rejected. Thus if they wanted to buy an item or provide new services it was better to pass the request through one of the researchers. This illustrates the low status of information specialists.
3.3.4 Academic Qualifications of Respondents

The respondents were asked about their qualifications and job status so that their level of education and the nature of their work could be assessed. Without knowledge of the work in which researchers were engaged, and their information needs, any information system risks being useless.

The respondents had a very wide variety of qualifications ranging from a secondary school qualification to a Ph.D degree. Overall, 2% of the respondents held only a secondary school qualification, 15% B.Sc., 8% Diploma, 6% higher diploma, 17% M.Sc., 2% M.A. and 50% Ph.D. In addition to their academic qualifications, respondents were asked to specify any further professional qualifications. Few respondents mentioned that they had further professional qualifications.

Table 8: Qualifications of the respondents

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Administrators</th>
<th>Scientists</th>
<th>Infor. Specialists</th>
<th>Total No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B.Sc.</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Diploma</td>
<td>3</td>
<td>5</td>
<td>1</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Higher Dip.</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>M.Sc.</td>
<td>13</td>
<td>13</td>
<td>-</td>
<td>26</td>
<td>5</td>
</tr>
<tr>
<td>M.A.</td>
<td>13</td>
<td>13</td>
<td>-</td>
<td>26</td>
<td>5</td>
</tr>
<tr>
<td>Ph.D</td>
<td>13</td>
<td>13</td>
<td>-</td>
<td>26</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td><strong>19</strong></td>
<td><strong>16</strong></td>
<td><strong>52</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

187
### Table 9: Administrators’ Qualifications

<table>
<thead>
<tr>
<th>Degree</th>
<th>USA</th>
<th>UK</th>
<th>USSR</th>
<th>Germany</th>
<th>Czech</th>
<th>Hungary</th>
<th>Total No.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.Sc.</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>M.Sc.</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>18%</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>76%</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

### Table 10: Researchers’ Qualifications

<table>
<thead>
<tr>
<th>Degree</th>
<th>USA</th>
<th>UK</th>
<th>USSR</th>
<th>Hungary</th>
<th>Bulgaria</th>
<th>Total No.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.Sc.</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>M.Sc.</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>5</td>
<td>26%</td>
</tr>
<tr>
<td>Ph.D.</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>69%</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>19</td>
<td></td>
</tr>
</tbody>
</table>

### Table 11: Information Specialists’ Qualifications

<table>
<thead>
<tr>
<th>Degree</th>
<th>Iraq</th>
<th>Lebanon</th>
<th>USA</th>
<th>Total No.</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>Diploma</td>
<td>4</td>
<td></td>
<td></td>
<td>4</td>
<td>25%</td>
</tr>
<tr>
<td>H.Dip.</td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
<td>19%</td>
</tr>
<tr>
<td>BA</td>
<td>5*</td>
<td></td>
<td></td>
<td>5</td>
<td>31%</td>
</tr>
<tr>
<td>B.Sc.</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>M.Sc.</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>M.A.</td>
<td></td>
<td></td>
<td>1</td>
<td>1</td>
<td>6%</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>1</td>
<td>3</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

*1 Course - VINITI, USSR
2 Training Course - London
3 Courses in library science abroad
4 Training Course - USC-Los Angeles, California
5 Attended local, national & international conferences, and training in USA, UK, Australia, India, etc.
### 3.3.5 Status of the Users of the Existing Information Services

The information specialists/librarians were asked "who were their users?" Their responses were: 19% academic, 23% post-graduates, 16% under graduates, 24% research-workers, 16% administrators and 2% others.

Table 12: shows the status of the users of the existing information services.

<table>
<thead>
<tr>
<th>Users' status</th>
<th>Respondents</th>
<th>Non-respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>13 19%</td>
<td>13</td>
</tr>
<tr>
<td>Post-graduates</td>
<td>15 23%</td>
<td>11</td>
</tr>
<tr>
<td>Under-graduates</td>
<td>11 16%</td>
<td>2 4</td>
</tr>
<tr>
<td>Research-workers</td>
<td>16 24%</td>
<td></td>
</tr>
<tr>
<td>Administrators</td>
<td>11 16%</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>1 2%</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>67 100%</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

### 3.3.6 Field of Research

Designing any information system risks being useless and impossible without the knowledge of the field of research conducted. The administrators were asked to indicate their organisation's field of research, the research-workers were asked about their own field of research and the information specialist about what subjects their units covered. Knowing the different fields of research, how much information is used by researchers in the different fields, what sources of information are available in each field, how the researchers keep themselves informed about new developments and trends in their fields of interest, etc. a comparison
could be made but the results of the interviews revealed that almost all research-workers in the different fields complained that the material covered by their information units was either inadequate or out-of-date. On the other hand, the librarians complained that the research-workers do not come to the library and use the information available for them. This leads us to believe that the two groups do not understand the jobs of each other. Table 13, overleaf shows their responses.
<table>
<thead>
<tr>
<th>Organisations</th>
<th>Researchers</th>
<th>Subjects or Material covered by Information Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field of Research</td>
<td>Field of Research</td>
<td></td>
</tr>
<tr>
<td>Astronomy</td>
<td>Astronomy</td>
<td>Natural Sciences &amp; Technology</td>
</tr>
<tr>
<td>Technology</td>
<td>Physical Chemistry</td>
<td>Sciences &amp; Technology</td>
</tr>
<tr>
<td>National Research Policy &amp; Planning</td>
<td>Technology</td>
<td>Food Sciences &amp; Technology</td>
</tr>
<tr>
<td>Palm &amp; Dates Researches</td>
<td>Mass Transfer &amp; Chemical Engineering</td>
<td>Engineering Sciences</td>
</tr>
<tr>
<td>Engineering</td>
<td>Management</td>
<td>Management Sciences</td>
</tr>
<tr>
<td>Management Development</td>
<td>Product Design &amp; Development</td>
<td>Economics, Statistics, Accountancy</td>
</tr>
<tr>
<td>Economics &amp; Administration</td>
<td>Agricultural Production</td>
<td>Engineering</td>
</tr>
<tr>
<td>Development for Eng Industries</td>
<td>Geology, Geophysics</td>
<td>Medical subjects</td>
</tr>
<tr>
<td>Medical Researches</td>
<td>Agriculture</td>
<td>Economics Planning, Statistics etc.</td>
</tr>
<tr>
<td>Long-term planning</td>
<td>Civil Engineering</td>
<td>Oil &amp; Economics</td>
</tr>
<tr>
<td>Petroleum</td>
<td>Chemistry</td>
<td>Physics, Chemistry, Biology etc.</td>
</tr>
<tr>
<td>Pure &amp; Applied Sciences</td>
<td>Chemical Engineering</td>
<td>Agricultural Sciences</td>
</tr>
<tr>
<td>Agricultural Researches</td>
<td>Ecological Physiology of desert plants</td>
<td>Building Materials</td>
</tr>
<tr>
<td>Building Researches</td>
<td>Socio-Economic Studies</td>
<td>Sciences &amp; Technology</td>
</tr>
<tr>
<td>Industrial Researches</td>
<td></td>
<td>Science &amp; Technology</td>
</tr>
<tr>
<td>Petroleum Researches</td>
<td></td>
<td>Science &amp; Technology</td>
</tr>
<tr>
<td>Natural Resources Researches</td>
<td></td>
<td>Agricultural Sciences</td>
</tr>
<tr>
<td>Agriculture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 13** - shows the Field of Research
3.3.7 Sources of Information

The information specialists were asked how many books, periodicals, research reports and other material there are in their collections and the collection's annual growth rate. Again, knowledge of the size and composition of the collections, and their expected growth rate gives another indication as to the scope of the information units, areas of unnecessary duplication, gaps in subject coverage and so on.

Table 14 shows existing sources of information and annual growth rate in 16 institutions

<table>
<thead>
<tr>
<th>Sources</th>
<th>Total stock</th>
<th>Annual growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books</td>
<td>500,571</td>
<td>37,825</td>
</tr>
<tr>
<td>Periodicals</td>
<td>7,024</td>
<td>1,489</td>
</tr>
<tr>
<td>Research reports</td>
<td>42,503</td>
<td>1,785</td>
</tr>
<tr>
<td>others</td>
<td>7,738</td>
<td>835</td>
</tr>
</tbody>
</table>

3.3.8 Sources used in the last six months

The researchers were questioned as to what information sources they had used in the last six months to find out information relevant to their work.

1. Regarding the form of information sources that they had used, 63% used lectures or meetings, 16% mass media, 89% books, 84% periodicals and 68% research reports

2. Regarding the source of information, 32% other researchers in their institution, 42% researchers outside their institutions, 16% information specialists/librarians, 16% their information unit and 16% information units outside their institution.
Table 15: shows sources used in the last six months to find out information relevant to their work.

<table>
<thead>
<tr>
<th>Sources of information</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>Non-respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lectures or meetings</td>
<td>12</td>
<td>63</td>
<td>3</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Mass media (TV, Radio, etc)</td>
<td>3</td>
<td>16</td>
<td>9</td>
<td>47</td>
<td>7</td>
</tr>
<tr>
<td>Books</td>
<td>17</td>
<td>89</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Periodicals</td>
<td>16</td>
<td>84</td>
<td>-</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Research reports</td>
<td>13</td>
<td>68</td>
<td>2</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Researchers in their inst.</td>
<td>6</td>
<td>32</td>
<td>4</td>
<td>21</td>
<td>9</td>
</tr>
<tr>
<td>&quot; outside their ins.</td>
<td>8</td>
<td>42</td>
<td>4</td>
<td>21</td>
<td>7</td>
</tr>
<tr>
<td>Librarian/information spec.</td>
<td>3</td>
<td>16</td>
<td>8</td>
<td>42</td>
<td>8</td>
</tr>
<tr>
<td>Organization's inf. unit</td>
<td>3</td>
<td>16</td>
<td>7</td>
<td>37</td>
<td>9</td>
</tr>
<tr>
<td>Inform. unit outside their org.</td>
<td>3</td>
<td>16</td>
<td>6</td>
<td>32</td>
<td>10</td>
</tr>
</tbody>
</table>

3.3.9 Periodicals scanned regularly

The researchers were asked if they scanned any periodicals regularly and if so, how many each month. The answers to this question show how aware researchers are of the need to use the literature to help their work. 74% answered that they scan periodicals each month.

3.3.10 Keeping abreast of recent developments in their fields

The researchers were asked about how easy, very difficult or difficult they found it to keep abreast of recent developments in their fields. The answers to this question showed whether the units were successful, intentionally or otherwise, at providing current awareness. 5% mentioned that it was "easy" to keep abreast of recent developments in their fields, 37% mentioned it was "very difficult" and 58% mentioned it was "difficult".
Further comments on sources of information by respondents

Most of the interviewees commented that the books and periodicals in the information units were either out-of-date or of poor quality. They complained that there was no means for finding out about the collections in other libraries/information units, and even if they were able to locate a useful or high quality source in another library, it might not be possible to gain access to it. Libraries/information units do not send acquisition lists to other libraries. A researcher may have to request the material he needs from abroad, although the material is already in a collection inside the country. Thus time, effort and money are wasted. There are no national union lists of holdings and no other ways of finding the contents of the various collections.

As Iraq is a long way from Europe, United States or the USSR, it can take from three to six months for a periodical or research report to reach Iraq by sea from these countries. Thus recent developments reach the researchers late. Much of the material gets lost on the way. If the user requests that the material be sent by air mail, this is done, but at great expense. The researchers commented that the only satisfactory way of keeping abreast of recent developments in their fields was by private communication with researchers abroad, or by membership of overseas learned societies. The researchers complained that since the library was a long way from where they conduct their
research work, they did not have enough time to go there, especially where transport was not provided for them. Also, most of the researchers complained that periodicals were not circulated to them. On the other hand, information specialists complained and commented that researchers did not come to the library even if it was in the same building, and mentioned that they did circulate periodicals but that researchers did not appreciate it.

Often they kept periodicals on their desks and the information specialists had to go and check every desk to find them. If the information specialists asked why he kept the periodicals, the researcher was either offended or excused himself, saying he had forgotten them.

In many cases, the information specialists never managed to find the circulated periodicals. Since librarians are held personally responsible for lost material, most librarians stopped circulating periodicals. The researchers were unaware of the role of the librarians/information specialists. Although the information specialist should always contact the researchers on receipt of material important to their projects, if the librarians contact the researchers too often, they will take offence and think the librarian is teaching them their jobs. At the same time, the researchers commented that many librarians do not know what research work in what subject areas is going on in the organisation. Therefore, the problem of lack of communication is a
two-way problem. This leads us to believe that there is no feedback between the users and the information units and this encourages the units to become passive with regard to the use of information.

3.3.11 Information activities, services, etc.

The respondents were asked what information services were available in their own organisation's information unit and in what form. The answers to these questions show the level of development of information services and activities in Iraq: without knowledge of the existing system, improvements cannot be recommended.

Table 16: shows the services and activities available

<table>
<thead>
<tr>
<th>Information services</th>
<th>Respondents</th>
<th>Non-respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Abstracting &amp; Indexing</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Bibliographies</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Reference collection</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>Photocopying of articles</td>
<td>11</td>
<td>58</td>
</tr>
<tr>
<td>Translations</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>Reprography</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>Current awareness</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>Loan of material</td>
<td>10</td>
<td>53</td>
</tr>
<tr>
<td>- Books</td>
<td>5</td>
<td>26</td>
</tr>
<tr>
<td>- Periodicals</td>
<td>6</td>
<td>32</td>
</tr>
<tr>
<td>Enquiry services</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Others</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Information services needed but are not available

1. The researchers were asked about what information services were required but are not provided. 68% answered "yes" that there are information services which are required but are not provided.

2. When the information specialists/librarians were asked about what information services were required by their users but are not provided, 5% answered yes to this question.

The differences in the answers given by each group show whether the researchers and librarians understood each other's jobs and what they can expect from each other, in terms of requests and information services. Table 17, and 18 overleaf show their responses.
<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>✓</td>
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Table 17: shows information services needed but not available as specified by 13 researchers
<table>
<thead>
<tr>
<th>Services Required but Not Available</th>
<th>Abstr. and Indexing</th>
<th>Current Awareness</th>
<th>Bibliographies</th>
<th>Ref. Collec.</th>
<th>Translations</th>
<th>Photocopying</th>
<th>SDI Services</th>
<th>Subject Indexes</th>
<th>Research Reports</th>
<th>Lending Facilities</th>
<th>Back Copies Issues</th>
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<tbody>
<tr>
<td>Information Specialists: Nos. 8</td>
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</table>

Table 18: shows information services needed but not available as specified by 8 information specialists/librarians.
Importance of Information Services

The administrators were asked how important they thought information services were to research. The attitude of the administrators is very important as they are responsible for research activities in their institutions. The introduction of new services or improvements in existing ones depends on their interest and agreement. In designing information services, it is essential to know how much they will be accepted by the people in charge as well as how much they will be used. 88% answered that the information services are "essential", 6% "very important" and 6% "important".

Table 19: shows the importance of information services

<table>
<thead>
<tr>
<th>Importance</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential</td>
<td>14</td>
</tr>
<tr>
<td>Very important</td>
<td>1</td>
</tr>
<tr>
<td>Important</td>
<td>1</td>
</tr>
</tbody>
</table>

Further comments on information services and activities by respondents

When the interviews took place, the writer asked the researchers about the nature of their requests (type of information and form). This was one aspect of trying to discover the researchers' information needs and the information services that they made the most use of, or valued most. Most of the researchers thought all the following services would be useful:
Abstracting and indexing
Bibliographies
Reference collection
Photocopies of articles
Translations
Reprography
Current awareness
Loan of material - books, periodicals and research reports
Enquiry service

None of them suggested other services. This leads the candidate to believe that firstly they had not thought deeply about the question and secondly that they knew little about information services.

Regarding the provision of information services and in what form, some interviewees commented that there was no provision of information services in their own organisation's information unit but only a traditional library, others mentioned that the services offered were very poor. It is clear from these answers that the existing information services are ineffective and inadequate.

There is no cooperation between information units in different organisations. Some interviewees commented that in order to borrow a book from another library, they needed an official letter from their own organisation, authorising the loan.

Regarding the importance of information services, most of the interviewees commented that information services are essential to research work. Many of them complained that they spent hours going around the libraries themselves in order to look for material or an article or research report that were essential for their research work.
Language in which information services are needed

The researchers were asked what languages they could read and in what languages they would prefer to receive information. This is vital to the establishment of translation services as it allows an estimate to be made of which languages it is most important to cover, and in which subject fields. It is also very important for library acquisition policies. In some libraries, large amounts of money are spent on publications in little-known languages which are therefore unused. The respondents were allowed to choose several languages. 58% preferred to receive information in Arabic, 95% in English, 11% in Russian, 6% in Bulgarian and none of the respondents preferred to receive information in French.

Table 20: shows language in which information is needed

<table>
<thead>
<tr>
<th>Language</th>
<th>Yes</th>
<th>No</th>
<th>Non-respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic</td>
<td>11</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>English</td>
<td>18</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>French</td>
<td></td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>Russian</td>
<td>2</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Bulgarian</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Further comments on language by respondents

The interviewees were asked what languages they had difficulty with, and whether they needed translation services. The librarians were asked what translation services and facilities were available to users. The researchers commented that translation
services were badly needed, because the official language in Iraq is Arabic whereas the vast majority of library holdings are in English, French, German, Russian and other languages. One researcher commented that if a user needs a translation, there is no systematic way of providing one. The user has to ask a favour of someone who does know the language, and this causes both delays and embarrassment. The creation of a translation centre would be most welcome but there would still be difficulties in maintaining translations of technical papers. Although some of the researchers claimed to be fluent in English, there is still a need for translations into Arabic from other languages. The extent of this need may vary from one discipline to another.

3.3.13 Existing Communication facilities

The information specialists were asked what communication facilities were available for providing services for the users and the proportion of requests received by each facility. Channels of communication facilities are at the heart of any information system, and the design of a system for the future in Iraq, depends on the extent and quality of the telephone, telex and postal services.

<table>
<thead>
<tr>
<th>Commun. device</th>
<th>respondents</th>
<th>non-respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Telephone</td>
<td>16  100</td>
<td>-</td>
</tr>
<tr>
<td>Telex</td>
<td>5   31</td>
<td>2</td>
</tr>
<tr>
<td>Letters</td>
<td>16  100</td>
<td>-</td>
</tr>
<tr>
<td>Others</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Further comments on communication facilities

The respondents had an opportunity, in the interviews, to discuss the difficulties of the present communication facilities. They answered the question of communication facilities on two levels:

a) human difficulties
b) technological difficulties

both of which seemed to be of equal importance to them.

Communications channels are essential to information flow and transfer, but respondents commented that information specialists were unable to understand their requests or to find material which filled their information needs. This was ascribed to the information specialists' lack of subject knowledge, and lack of English language ability. The respondents also complained of the lack of technical facilities. There are no telex facilities which can be used for ordering material or ordering an article needed very urgently to the research work carried out at that time. There are no telephone services internationally either. On-line search systems have not been introduced in the country yet. Mostly the only available means of communication are postal services which are often slow and delayed causing material to arrive after the need has passed or the material gets lost on the way.
Publicity of the available information services

The information specialists were asked if the services available were ever publicized through TV or radio, newspapers, exhibitions, posters, lectures, open-days, etc. In many cases users were not aware of the information services available. Therefore, they did not use them. 19% responded that the information services available are publicized through newspapers, 31% through exhibitions, 38% through lectures, 6% through seminars.

Table 22: shows publicity of the information services

<table>
<thead>
<tr>
<th>Publicity method</th>
<th>Respondents</th>
<th>Non-respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>TV or radio</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>Newspapers</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Exhibition</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>Posters</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>Lectures</td>
<td>6</td>
<td>38</td>
</tr>
<tr>
<td>Open-days</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>Seminars</td>
<td>1</td>
<td>6</td>
</tr>
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</table>

Further comments on publicity of the available information services - by respondents

In the interviews, the respondents were asked about publicity for the information services; most of them commented that there was none. Communications between the information units or centers and their users were very poor. This was both a cause and an effect of the lack of understanding that existed between users and librarians/information specialists. Often they seemed to be living in two different worlds, with no idea about what each other's jobs entailed or the problems faced. Information specialists asserted that researchers never tried to use the information services, while the researchers asserted that no services were offered.
3.3.15 Employment in information centers

The respondents were asked about how many professional and how many clerical staff were employed in the information centre. The number of staff is some indication of the capacity of the information centre for offering information services, in terms of scope, quality and level of sophistication. Upon the quality and quantity of well-trained professional staff available depends the success of an information system. Ten institutions responded to this question and there are 61 professionals and 20 clericals employed in their information units in total.

Further comments on information specialists by respondents

Most of the administrators and researchers felt that the majority of staff in the information centers were ill-trained, lacked subject knowledge and were therefore unable to help the researchers quickly and efficiently. They also lacked knowledge of English and thus were unable to classify material correctly. Most of the respondents commented that the information specialists needed training abroad in order to learn the language and to gain experience of new techniques. Many respondents commented that their librarians were just custodians of books, and offered no information services at all. On the other hand, the librarians suspected that researchers were not aware of the vital role information services play in their research projects, and that researchers lacked library knowledge and could not define or express their information needs in a way which was meaningful to them.
3.3.16 **Library/information centers—Bulletin**

The researchers were asked if their information centre published a bulletin describing the structure of their collection, the information services that were available and how best to use them. A number of respondents answered with a smile and in a sarcastic way said "are you kidding". This reaction revealed that either they were unaware of what the information centre did, or that the centre was completely passive. The librarians commented that publishing a bulletin will need more effort, time and money and also it needs professionals with knowledge, ability and interest in order to be able to publish such a bulletin. Among 20 organizations approached, only one library published a library bulletin.

3.3.17 **Library Training**

The researchers were asked if they had any library training. It was suggested that libraries must use very simple system and training programmes for users of library/information centers are a must. None of researchers had taken professional courses in library education or training of any kind but a few of them knew a little about how to use a library and this had been learnt whilst studying abroad.
In Iraq, up until now, library training has not been integrated into school, college and university teaching. Thus the researchers do not know about libraries/information centers or their information services or how to use them. This was especially true of the junior researchers. Most of the librarians had had library education for two years at university and a few of them held a higher diploma in library science and information studies. On one hand the majority of the researchers complained of poor information services and activities and lack of well-trained information specialists. On the other hand the majority of the information specialists complained of the user's lack of understanding of how to use the library, their inability to frame their queries so that librarians understood them.

3.3.18 Processing of the Material

The information specialists were asked if they used systematic procedures when processing the material and if they used standard or modified classifications or procedures. Standardisation and systematic procedures help in compiling national union lists and catalogues and when merging libraries. Also, it is important for cooperation and coordination between libraries. Consistency in each library is also important in making the libraries easier to use.
Table 23: shows the classification and cataloging standards used in their information centers with few modifications

<table>
<thead>
<tr>
<th>Infor. center/library</th>
<th>Classification scheme and cataloging standards</th>
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<tr>
<td>6</td>
<td>UOC</td>
</tr>
<tr>
<td>10</td>
<td>DDC</td>
</tr>
<tr>
<td>9</td>
<td>AACR</td>
</tr>
<tr>
<td>3</td>
<td>LC - List of Sub. Headings</td>
</tr>
<tr>
<td>1</td>
<td>LC - National Union Catalogue</td>
</tr>
<tr>
<td>1</td>
<td>List of Arabic Sub. Headings</td>
</tr>
<tr>
<td>1</td>
<td>British National Bibliography</td>
</tr>
</tbody>
</table>

Modification of UDC in:

- Islamic Religion
- Islamic Philosophy
- Arabic Literature
- Arabic History
- Arabic Language
References
