

**A STUDY OF INFORMATION NEEDS AND USES OF THE INFORMAL
SECTOR OF UGANDA**

VOLUME ONE

By

Ikoja-Odongo, J.R.

**Thesis submitted in fulfillment of the requirements for the award of the Degree of
Doctor of Philosophy (Library and Information Science) of the
University of Zululand, Kwa Dlangeswa,
SOUTH AFRICA.**

MAY 2002

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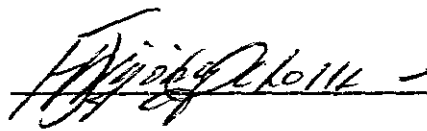
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MAY 2002

APPROVAL

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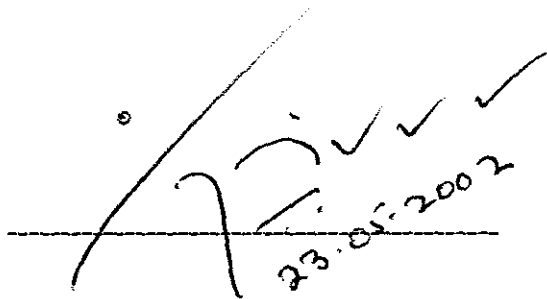
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DECLARATION

I declare that this study: "The study of the information needs and uses in the informal sector of Uganda", except where specifically indicated to the contrary in the text, is my own work both in conception and execution. All the information that was used have been and are duely acknowledged in the text and in the references.

Signed:

A handwritten signature in black ink, appearing to be 'J. R. Ikoja-Odongo', is written over a horizontal dashed line. To the right of the signature, the date '23.05.2002' is written in a similar hand.

IKOJA-ODONGO, J. R

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DEDICATION

This work is dedicated to my late father, Mr Jackson Odongo, my loving mother Josephine Akello Odongo, and my well meaning and caring wife, Florence Apio Ikoja and my children to whom I have proved a significant example to their lives. What I have done will be given the strength in God and their hands

Thank you my Lord

LIST OF ACRONYMS

ACCU	Association of Courier Companies in Uganda
AEATRI	Agricultural Engineering and Appropriate Training Research Institute
ACFODE	Action for Development
AGRIN	National Information System for Agricultural Science and Technology
AGRIS	Agricultural Research Information System
AHI	African Highland Initiative
AMREF	African Medical Research Foundation
ARIS	Agricultural Research Information System
ATN	African Technology Network
BEASTCD	Animal Production and Dairy Technology Information
BOP	Balance of Payments
CARIN	National Current Agricultural Research Information.
CARIS	Current Agricultural research Information System.
CD-ROM	Compact Disk- Read Only Memory
CAS	Current Awareness Service
COMESA	Common Market for Eastern & Southern Africa.
COREC	Coffee Research Centre
DAI	Development Activity Information
DENIVA	Development Network of Indigenous Voluntary Associations
FAO	Food and Agricultural Organization
FHRI	Foundation for Human Rights Initiatives
FEDEX	Federal Express
FIDA	International Federation of Women Lawyers
FIRI	Fisheries Research Institute

FISA	Federation of Informal Sector Associations
FORI	Forestry Research Institute
FOSRI	Food Science Research Institute.
GIS	Geographic Information System.
GII	Global Information System
GDP	Gross Domestic Product
GNP	Gross National Product
HIS	Health Information System
HURIPPEC	Human Rights Information Centre
IIS	Industrial Information System
IACs	Information Analysis Centres.
IEC	Information, Education Centre
ICT	Information and Communication Technology
IDRC	International Development Research Council
INFORM	<i>Information for Research Managers</i>
Isis- WICCE	Isis- Egyptian Goddess. Women's International Cross Cultural Exchange.
IS	<i>Informal Sector</i>
ILO	International Labour Organization
ISO	International Standards Organisation
JASPA	Jobs and Skills Programmes for Africa
LIRI	Livestock Research Institute
MTAC	Management Training and Advisory Centre
MFPED	Ministry of Finance, Planning and Economic Development
MSEPU	Micro & Small Enterprises Policy Unit
MI&B	Ministry of Information and Broadcasting
NAADS	National Agricultural Advisory Services.
NGO	Non- Governmental Organisation
NARO	National Agricultural Research Organisation
NW&SC	National Water & Sewerage Corporation
NEMA	<i>National Environment Management Authority</i>

NOTU	National Organisation of Trade Unions
OCLC	Online Catalogue Library Centre
ODA	Overseas Development Association
PTA	Preferential Trade Area
PSF	Private Sector Foundation
PRESTO	Private Enterprise Support, Training and Organisation Development
PSRRC	Public Service Review and Reorganisation Commission
SDI	Selective Dissemination of Information
SAARI	Serere Agricultural and Animal Research Institute
SAP	Structural Adjustment Programme
STDs	Sexually Transmitted Diseases
TASO	The Aids Support Organization.
TEEAL	The Essential Electronic Agricultural Library.
TIPS	Technological Information Promotion System.
TREECD	Worldwide Forestry Information
UBOS	Uganda Bureau of Standards
UCC	Uganda Communication Commission.
UDHR	Universal Declaration of Human Rights
UJAFAE	Uganda Joint Action for Adult Education
UMA	Uganda Manufacturer's Association
UMACIS	Uganda Manufacturer's Association Consultancy & Information Service
UNBS	Uganda National Bureau of Standards
UNCST	Uganda National Council of science & Technology
UN	United Nations
UNICEF	United Nations Children's Fund.
UNIDO	United Nations Industrial Development Organization.
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNDP	United Nations Programme
UNFA	United Nation's Fund for population Activities
UPL	Uganda Postal Ltd

USSIA	Uganda Small Scale Industries Association
USAID	United States Agency for International Development
UTL	Uganda Telecommunication Ltd
UVRI	Uganda Virus Research Institute
VETCD	Veterinary Science and Animal Health Information
WBS	Wavamuno Broadcasting Service
WFP	World Food Programme
WHO	World Health Organisation
YWCA	Young Women Christian Association

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ABSTRACT

The aim of this study was to determine the information needs and uses of the informal sector in Uganda. For this purpose, it was necessary to review literature on the informal sector and to provide an overview of the information systems and services in the country. The demographic, business and cultural characteristics of the informal sector have also been established in order to identify the information needs of the informal sector and to explore the ways in which entrepreneurs seek information and the sources that they use to access such information. The study furthermore explored the uses to which information is put and the impact that it has on the sector. In addition to this, the study identified factors that affect access to information as well as shortcomings in the information services and systems of Uganda. Solutions are suggested to fill gaps that are seen to be present in the system and, finally, an information model, which generates an agenda for further research, is proposed for the sector.

The study made use of qualitative study design, the historical survey, observation, and the critical incident method to achieve its goals. The survey covered the populations residing in the various districts of Uganda, including entrepreneurs working in the informal sector. Samples were taken from six districts, of which twenty-eight persons formed the focal discussion group for the pilot district, while six-hundred-and-two entrepreneurs, twenty-three organisation representatives, and thirty-five informants represented the national population sample. Six research instruments were used in the study.

The findings show that the informal sector in Uganda dates back to prehistoric times. Uganda's information systems and services vary greatly in that they range from indigenous information systems to the more formal kinds. Adults as well as children are employed in the sector and their income is generally low. While the entrepreneurs encountered in the study usually had a very basic educational

background, there were also some well-educated people, including university graduates, working in the sector. Working hours were found to be flexible and depended on the type of activity that the entrepreneurs pursued. The activities of the sector were basically motivated by the need for personal survival, possible opportunities for further training, and the availability of market and specific skills. The study found that some 1,5 million people in the informal sector were employed by about 800,000 entrepreneurial business concerns spread throughout the rural and urban areas. Very little evidence of division of labour and organisation of production was found, while most of the businesses were found to be unregistered. Record keeping, however, was found to be prevalent among the businesses covered in the survey. Personal capital was mostly relied on for starting up the businesses, and products tended to be inferior. There was limited evidence to suggest that cultural beliefs had any influence on the sector's activities and/or performance.

The information needs of the sector were found to be contextual. Entrepreneurs typically needed information with regard to the following areas of activity: training and skills, markets and marketing techniques, cheaper sources of raw materials/supplies, finance, tools and equipment, business management and development, information centres, knowledge of production processes, advocacy and lobbying skills, new areas of investment, record keeping, quality improvement and recognition by government.

Methods of information seeking were largely found to be informal. The informal entrepreneurs made very little use of reading and libraries for accessing information, and informal sources were used more often than formal sources. However, the radio as a source of information found ubiquitous use among the entrepreneurs.

It was found that information is used in marketing, the location of raw materials/supplies, pricing of products and services, improving skills, making decisions, becoming more enlightened, in order to promote self-reliance, and in

understanding current affairs, including government regulations and how to deal with and relate to other people.

The impact of information use was judged in terms of business improvement, improved coordination of workers and activities, the upgrading of skills and the creation of better opportunities, improved living standards, sales and increased profits, among others.

Problems encountered among the informal business communities included the inability to obtain required information, lack of specific sources of information, high cost of information and the time factor involved in getting the required information. Many entrepreneurs did not know what information facilities existed and were apathetic in this regard. It was furthermore found that language barriers and illiteracy impacted negatively on entrepreneurs in their efforts to obtain information. Entrepreneurs were furthermore found to have the habit of concealing information from one another.

Problems encountered in the usage of information systems in Uganda included the following: limited use of the public library system by entrepreneurs, very few public libraries, the availability of irrelevant information in public libraries for entrepreneurs, lack of information centres for entrepreneurs, very low usage of associations for information, under-developed telecommunications infrastructure throughout the country, wrong timing of programmes on radio, low priority given to information in budgets, the publication of newspapers in a few local languages only, and poor marketing of information services.

The study recommends that, in order to increase information availability to the informal sector, it is necessary to deal with the following problems: illiteracy, languages of packaging information, convenient timing of information distributed by means of radio broadcasts, redefining the role of the public library to society, increased research into the specific types of information needed by the

entrepreneurs in their different trades. The study urges government to establish an information centre for entrepreneurs and to increase publication of information in other local languages and other formats as a means of increasing channels of information dissemination. The Government is furthermore urged to work hand in hand with the private sector to increase programmes meant for the informal sector. Organisations owning radio programmes aimed at the sector are urged to plan convenient times for airing programmes for the benefit of the entrepreneurs. Individual entrepreneurs are urged to take information seriously and to use any means available to them to acquire information. Finally, the study shows that there is an urgent need for the establishment of a policy with regard to informal sector information systems and services, and that policy frameworks need to be developed for the information systems in the country.

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CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Conceptual Setting

Recognizing the fact that information is of the greatest value as a means by which people can promote social progress and better standards of life, the United Nations in 1948 authorized cooperation with member states and sanctioned information as one of the fundamental human rights in the Charter of the Universal Declaration of Human Rights (UDHR). The Charter, in Article 19, states that:

Everyone has the right to freedom of opinion; this right includes freedom to hold opinion without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers (United Nations, 1995:305; Froechlich, 1997:11).

According to the philosophy of the United Nations, ensuring that information is accessible to people is one of the means of ensuring their fundamental rights. While the Charter sets a common standard of achievement for all people, action to realize this noble goal was left to the member states.

In 1961, following the UN Charter, the African Charter on Human and Peoples Rights was proclaimed. This Charter, like its predecessor, recognizes and guarantees information as one of the political and civil rights of individuals. According to Article 9, subsection 1, every individual shall have the right to receive information (Umozurike, 1997:148). Where the right to information refers to an educational aim and human development, its realization can be found in the role of public libraries as institutions established specifically for the promotion of self-education. Public libraries are mandated to do just that because they represent readily accessible resource centres which are supposed to offer free services to the community or at nominal cost, thereby removing any form of discrimination. Any member of the community, irrespective of his/her background or motives, may approach the public library to satisfy his/her information needs. Furthermore, if people are accorded a right to self-determination, they have a right to a

diversity of materials and information through which they could actualize their self-determination. Froechlich (1997:11) cites a working document tabled at a 1974 UNESCO intergovernmental conference on the planning of national documentation, library and archives infrastructures which asserts that "Information is an essential part of a nation's resources and access to it is one of the basic human rights..." Through access to information, the person participates in the cultural life of the community. It is therefore evident that such an approach is compatible with the role of information in the process of democratization.

In Uganda the right to information is considered to be an individual right that is part of the benefits of citizenship. According to Article 41 (1) of the country's Constitution, every citizen has the right of access to information in the possession of the State, or any other organ or agency of the State except where the release of such information is likely to prejudice the security or sovereignty of the State or interfere with the right to the privacy of any other person. However, according to sub-section (2) of the same Article, Parliament has the power to prescribe the manner in which information referred to in Article 41 (1) can be obtained. It is stated "Parliament shall make laws prescribing the classes of information referred to in clause (1) of this article and the procedure for obtaining access to that information Article 41" (The Constitution of the Republic of Uganda, 1995: Chapter 4). So far this constitutional requirement has not been prescribed. No new legislation describing the types of information in possession of state has been made. Only the law courts can make the interpretation of what is meant by state information.

The spirit of all charters come to the same conclusion in this regard, and that is that information is a vital link to development in all spheres of life, including the enjoyment of individual and collective rights. In the spirit of natural justice, all people should have access to information on an equal basis, irrespective of their backgrounds, race, creed or religion.

Despite the importance of information to human welfare, the position is far from being achieved. Paradoxically, humanity is divided between those who have and those who do not have, between the *information rich* and the *information poor*. On the one hand, the world is increasingly witnessing the development of a Global Information Infrastructure (GII), that forms “a seamless web of communication networks, computers, databases and consumer electronics that will put vast amounts of information at user’s finger tips” Chisenga (1999), quoting the United States Infrastructure Task Force in 1994. On the other hand, Mchombu (1996:75) states that there are millions of people around the world who, for one reason or another, are facing an acute shortage of relevant and timely information (including information services) to bring about development. The latter category of people fall in the information bracket known as the *information poor*. Ironically, it is these very people who are at the same time poor in all other necessities of life and find themselves caught up in a vicious circle of poverty, including information poverty.

Arguably, poverty is not only dehumanizing and humiliating, but also has attached to it a stigma that can stifle any development efforts. As a state of deprivation, poverty is a central subject of debate in all fora designed to bring about sustainable development. The debate has widened to include the information sector. Ocholla (1998) for instance, provides a broader view of what he considers as the *information poor*. He finds the state of lacking information reminiscent of the economically disadvantaged populations of the developing countries. These include the rural people who are geographically isolated by lack of communication and transport systems; those who are disadvantaged by cultural and social poverty, especially the illiterate, the elderly, women and children; the politically disadvantaged; the minorities who are discriminated against by race, creed and religion and the physically disabled. In view of the right to information, information poverty which goes against the very principle on which the UN ideal is consecrated, is a serious problem to nations where the aforementioned conditions are evident.

Boon (1992:70-72) summarizes, historically, the factors that lead to information poverty as follows. Certain communities do not regard information as a basic and valuable

resource. Ineffective infrastructure and services, marked by a lack of adequate and appropriate information technology, were responsible for setting the vicious circle in motion. Furthermore, there was a shortage, or even lack, of appropriately qualified information workers. Information services did not meet the needs of people. Information was irrelevant, inappropriate, and unacceptable. There were problems of accessibility to indigenous information. It was very expensive to access and use international information. There was lack of co-operation between services and systems in developing countries that resulted in information resources being widely scattered and duplicated. Furthermore, there was a lack of government support for allocation of information resources and policy as well as a lack of appropriate community resource centers and, worst of all, illiteracy was rampant. Such conditions are widespread in Africa, including Uganda.

As a result of information poverty, accessibility to information has become a monumental task and a major developmental issue to humanity. Lack of information causes social and economic stagnation in all spheres of human activity. For example, Asamoah-Hassan (1997:122), drawing experience from Ghana, observes that integrated rural development becomes stunted under such conditions. Using a Nigerian example, Nwagha, (1992:80) laments that the rural people are conditioned to live in ignorance about vital issues such as preventative healthcare, good nutrition, appropriate technology and environmental sanitation, which could improve, to a large extent, the quality of their lives. In urban areas, the situation is more complicated. Whereas in rural areas, people know one another, this is not the case in urban areas. Yet the majority of them are enlightened and well informed. They are more conscious and more assertive of their rights than the rural people and their information needs are more diverse than those of their rural neighbours are. Therefore, information becomes one of the most essential items for urban dwellers.

Against this background, information is seen as an agent that plays a catalytic role in the development of a human being, in the formation of his identity and in personal development. Hence, information is the key to self-determination within mutual dependency and integrity of each culture (Bell, 1986b: 326). The growth and the

wellbeing of an individual and a country as a whole depend on peoples' accessibility to quality information.

Beyond individual needs, information is necessary for sustainable development, that is, for decision-making, creativity, innovation, effective market positioning and long term planning (Boon, 1992:63; Lewis, 1985:15). In this context, information is considered to be equally as important as capital, labor and raw materials as factors of production (Marchand and Horton, 1986:21).

Looked at from a business point of view, it is not a new idea that information is a crucial element of any successful market economy (de Lange, Boon & Britz, 1993:1). It is a major resource that businesses require for monitoring environmental trends, products, services, markets, regulations, customers, forecasting future events, countering competitors' strategies and in developing new products. Firms use it to gain and maintain a competitive edge over competitors and to hold on the markets. Efficiency of business operations is measured in terms of utilization of information in making organizations achieve their objectives. It is for this reason that companies such as Microsoft and Mackintosh place a high premium on information. These companies have made fortunes out of the intelligent application of information to business. In the context of business management and commerce, information is valued as a corporate and a prime resource.

In matters of security, information assumes even a more strategic role. Information is and can be used as a weapon through intelligence gathering. Security organizations, like business organizations, require all kinds of information for offensive and defensive purposes against an enemy or competitor (Taylor & Farrel, 1994:46-90). In this regard, Dedijer and Jequier in Ouma-Onyango, (1997:53) refer to information as 'intelligence' which according to them, amounts to the ability of an institution to acquire new information and knowledge, make judgments, adapt to the environment, develop new concepts and new strategies and to act in a rational way. Ventura also in Ouma-Onyango (1997:53), identifies social intelligence as the information that fuels action by providing confidence for the use of otherwise static information. He suggests that it is information

that causes change by directing and shifting people out of a state of acquiescence and complacency with existing levels of knowledge. In addition, when information is used to plan and advance the future and to cope with the attendant uncertainties, it is referred to as strategic information (Ouma-Onyango, 1997:53). He argues that informed strategic decisions are founded on quality information about prevailing circumstances. This accords with Dedijer and Jéquier's perception of social intelligence as the organizational capacity of a nation, government, corporation, or any social organism, to acquire and use information in order to probe its environment, identify new threats and challenges, and respond in a creative way to new circumstances. Considered in these terms, information should be appreciated as a valuable strategic resource, in line with the huge investments that have been made to capture, process, transmit, store and utilize information. Briefly, it could be said that information has become the world's most powerful resource and a tradable commodity without which it is difficult to imagine how the changes taking place in the world have come about.

1.2 Contextual Setting

Although Uganda is an East African country with a developing economy, it is counted among the least developed in the world. Its economy depends both on the formal and the informal sectors. The informal sector (I.S) in Uganda, according to the International Labour Organization/Jobs and Skills Programme for Africa (ILO/JASPA), is growing rapidly and it is very active (Ministry of Planning and Economic Development MPED, 1989:2). Its growth was estimated at an annual rate of 25% over the last three years (Katatumba, 1998:5). After 1998, no new information as to rate of its growth has been published. The figure could be up or down. Factors contributing to this growth include: retrenchment in the public service, lay-off in public enterprises, demobilization of soldiers, the increasing number of school dropouts without formal employment, on-going rural urban migration, increasing entry of women and children into the informal sector, as well as "frozen" vacant positions in the Public Sector (Ssemogerere, 1996:13). The automatic entry of illiterate people into this sector is also seen to be a contributing factor (Katabira, 1995:45). The informal sector is the main bulwark against unemployment, destitution and crime (MPED, 1989:162).

The informal sector in Uganda has also grown out of the economic crises that Uganda experienced in the 1970s and early 1980s. These were due to the collapse of the formal sector in the 1970s, the expulsion of enterprising Asians during the same period, and the political instability of the 1970s and 1980s (Okumu, 1994:8). The crises were also due to the failure of the modern (protected) sector to cope with the growing number of job seekers and the structural adjustment programmes, which entailed stringent reductions in the growth of recurrent expenditure in government as well as in the public sector organizations.

The informal sector in Uganda is that sector of the economy that is estimated to employ about 20 percent of the population of working age (men, women, and children – able and disabled) (Katatumba, 1998:5). But relying on observation, there appear to be more persons in the informal sector today than it was in the 1998. Increasing populations without formal employment, diminishing job opportunities in the public and private sector may explain this partly. This implies that more than 60% of the entrepreneurs depend on their businesses for at least one half of their household income. It is also estimated that there are about 800 000 micro and small enterprises in Uganda providing employment to approximately 1.5 million people. Census of small and micro businesses is going on this year (2002). It is likely to give a better perspective of the sector in the current times. With an estimated annual growth of about 20-25%, the sector has the potential for providing employment and to spur economic growth, as well as to take a leading role in poverty eradication (Luwangwa, 1998:8). It is made up of individuals and micro- and small enterprises with self-employment. Most of its activities are family based, require limited capital, rely on indigenous resources, and are labor intensive and easy to join or leave. Skills are acquired largely outside the formal school system, and can easily be adapted. It is a sector with a tendency to operate in unregulated and competitive markets, and outside legal requirements. A very large proportion of this sector is mostly underdeveloped and still very fragile. Constraints revolve around inadequate access to credit, lack of serviced premises, inadequate technical and entrepreneurship skills as well as inadequate business-related information infrastructure (Kuteesa, 1998:2). In most cases enterprises were created from personal savings or

financed by informal saving schemes. Banks played an insignificant role in their operations. The motive for entry was essentially survival, rather than profit. The working conditions are usually extremely hard and poor (African Development Bank, 1997:117). The sector embraces a heterogeneous mix of activities ranging from rural "off-the-farm" to urban activities. It provides a graduation process, especially from agricultural production to processing and marketing and provides local inputs to the manufacturing sector (Katatumba, 1998:5).

The term "informal sector" was introduced about thirty years ago. The basic notion behind the concept was the existence of a number of combinations of labour and capital to produce and sell goods and services. For example, the International Labour Organization that popularized the concept of the informal sector described it in the early part of its history, as all those activities that operate largely outside the system of government benefit and regulation (ILO, 1977:4). The ILO has since revised this concept to cover a multitude of characteristics that are specific to the urban "non-modern sector" of developing economies. In the report of the Director-General to the ILO Conference in 1991 (ILO: 1991), the term referred to very small-scale units producing and distributing goods and services, and consisting largely of independent, self employed producers in urban areas of developing countries, some of whom also employ family labour and/or a few hired workers or apprentices. These units operate with very little capital, or none at all. They utilize a low level of technology and skills and therefore operate at a low level of productivity, which generally provide very low or irregular incomes and highly unstable employment to those who work in it. They were informal in the sense that they are for the most part unregistered and unrecorded in official statistics. They tended to have little or no access to organized markets, to credit institutions, to formal education and training institutions, or to many other public services and amenities. Indeed, such units are never recognized, supported or regulated by the government and they were often compelled by circumstances to operate outside the framework of the law. Even when they were registered and respected, they were almost invariably beyond the pale of certain aspects of the law, social protection, labor legislation and protective measures at the workplace (ILO, 1999:1). In 1993 the ILO, for statistical purposes, provided a new

definition that described them as consisting of units engaged in the production of goods or services with the primary objective of generating employment and income for persons concerned. These units typically operate at a low level of organization, with little or no division of labor and capital as factors of production and on a small scale. Labor relations, where they exist, are based mostly on casual employment, kinship or personal and social relations rather than contractual arrangements with formal guarantees. Production units have the characteristic features of household enterprises. The fixed and other assets that are used do not belong to the production units as such but to their owners. Expenditure for production is often indistinguishable from household expenditure. Activities performed by production units of the informal sector are not necessarily performed with the deliberate intention of evading taxes or social security contributions, or infringing labor or other legislation or administrative provisions. Accordingly, the concept of informal sector activities should be distinguished from the concept of activities of a hidden or underground economy. This definition expands on issues that were first tackled in the Report of the Director General of the ILO (1991). The definition is silent about the informal sector in rural areas, no matter how small they may be. But thus defined, the notion of “informal sector” becomes quite clear as that sub sector of the economy covering small-scale income-generating activities.

Indeed a plethora of concepts and terms have been coined to describe the economic transactions which are not captured (or, which are under-reported) in official documentation reflecting the Gross National Product (GNP) (Maliyamkono and Bagachwa, 1990:26). The informal sector has also been described rather negatively. It is that part of the economy that operates outside the law or which escapes taxation; the “hidden economy” that escapes the purview of the current societal measurement; the “underground economy” which, due to “un-reporting and/ or under-reporting”, is not measured by official statistics; the “parallel economy” whose activities are characterized by lack of formal transactions.

At face value, it appears from the above definitions that the informal sector is of lesser importance than the formal sector. Consequently, the information needs of the sector are

not seen as important at all. However, it is also observed that the informal sector in many African countries is growing rapidly (ILO/JASPA, 1987:14-16). For example, in Uganda alone, the informal sector contributed 13.7 % of the national labor force in 1989 (MPED, 1989:ix-x). This figure could be rising as a result of more people joining the sector. For instance, the informal labor force in urban areas of selected countries (Uganda inclusive) reveal that in 1993, 84% of the total employment in the country came from this sector. Men accounted for 68% and women 81% (ILO, 1999:3). This implies that the promotion of the sector in Uganda, as it would be in most affected countries of the world, is a key means of bringing about sustainable development, particularly targeting the majority who live below the poverty line. It represents a way of closing the widening gap in the dual economy that currently exists (Katatumba, 1998:5). The informal sector is extremely visible and resilient – for example, in Latin America about 50% of the non-agricultural workforce is engaged in the informal sector. In Asia, it is between 40 to 60%, in Africa 75%, and for the populous India, the figure is 93% (Charterjee, 2000). This growth means that the information needs of the sector can no longer be ignored. It is presumed in this study that the informal sector has information needs that should be satisfied. They could include the following alternative employment opportunities for some of its workers; *training opportunities and financial support to business enterprises*. They could also include lobbying and advocacy skills; insurance and government policies, especially with regard to modernization of the economy through industrialization; record or book keeping; *business management and information regarding politics*, especially with reference to the rights and duties of individuals in Uganda.

In this study, information is perceived as occupational information. This information is said to contribute to any of the following making decisions to engage in a particular business; implementing a decision to start a particular business; judging the amount of capital to invest; determining the nature of support staff required, including their number and the skills they should possess; and establishing who the likely customers are. There is also the need to establish sources of inputs and to determine the size of the business as well as establishment of the requirements for the business and the scope of its operations. In addition to this there is the forecasting of sales; the monitoring of market trends; and

the establishing of good relations with potential customers. It is against this background that the research problem was formulated.

1.3 The statement of the problem

There are very few studies in Uganda that focus on the provision of information and on information needs and uses with regard to small business enterprises in general and to the informal sector in particular. This information deficit includes the information problems that entrepreneurs face in seeking and using information in their enterprises. There is furthermore no empirical evidence to rely on and the size, nature, range and activities of this sector are largely undocumented. The dearth of information, along with lack of a data-based audit on the Sector (MPED, 1989: 107&162) implies that Uganda's information system is not only incomplete, out of date and inaccurate, but that the role and impact of information on the sector has not been measured. There is also a wide information gap with regard to Government, NGOs and other stakeholders with interest in the sector. The stakeholders do not know where and how the sector acquires information, nor do they know the types and sources of information and services used. In essence, the stakeholders have no idea about the level of information flow and exploitation in the informal sector. This lack of knowledge hampers the development of the informal sector in Uganda. And for this reason there is an urgent need to come to grips with its scope and composition in order to understand its operation and its contribution to the national economy. The study therefore sets out to identify and suggest measures to address the information gaps of the sector by assessing its information needs and uses. It makes proposals/recommendations on the kind of information that is required and suggests a model that could be applied to the establishment of an appropriate information system for the sector.

1.4 Motivation for the study

The informal sector is the part of the Ugandan economy that is deeply rooted in the history, customs and the culture of the country. It is the second economy that has shown a remarkable ability to survive and expand in recent years, despite little government support in the past. This reflects on its flexibility and capacity to reconcile the traditional

socio-cultural values with economic efficiency requirements (African Development Bank, 1997:117). The informal sector contributed over 13% to the national GDP and it is almost twice as big as the formal sector. It is therefore important that more is known about it. Its information needs are unknown and there is no information system that appears to adequately address the problem of information flow into the sector. It is therefore of crucial importance to define its information needs in an effort to meet them. This would give the sector a chance of enhancing its activities. In undertaking this study, an attempt was made to obtain the required data for planning purposes.

How does the lack of sufficient knowledge of information needs and uses become a major problem? The informal sector is as old as humanity. Stone Age people made implements out of indigenous resources that existed around them. Because informal activities have been associated with early man, their practice has for a long time been branded as a feature of primitive people. Unfortunately this kind of negative thinking seems to have persisted for too long a time. It is for this reason that the informal sector, as an exploratory way of meeting local needs in the simplest manner, has for a long time been paid little or no attention at all. Fortunately, this kind of attitude has been changing in recent times because the products from the sector have actually been improving in quality. Some of its products have formed the basis for technological innovations. For instance, the manufacturing of metal doors, windows, hoes, water sprinklers and many other products have been thought of as the privilege of modern industrial production. In recent decades, this myth has been discarded. Metal fabrication by the informal sector is now a major activity in many urban and rural areas in East Africa and probably in most of Africa. For instance, in Kenya, the *Jua Kalis* make *jikos* and water sprinklers for irrigation.

The advantage is that some, if not many, items are moderately priced and can be acquired on loan and/or other agreed terms, unlike the products of the modern industrial sector whose prices and trade terms are most likely, unfavorable to the local person. The informal sector also uses by products from the formal sector and recycles them. For instance, a few decades ago, the African people used to make their own wooden combs.

Africans, like the Romans of old, still make shoes out of animal skins. African earthen pots are their "refrigerators." Baskets have even a longer history extending to Biblical times. Moses was laid in a basket for keeping him afloat on the river. In the Andes of America, important people were buried with baskets, a practice that continues in some orthodox cultures. Dugout canoes could have been the basis for motorboats. All these are products from the informal sector and serve to illustrate that this sector serves as an example of man harnessing his environment. The informal sector relies for most of its development on indigenous knowledge and indigenous resources and its modes of production merely change to keep up with time and resources. The capitalist mode of production has changed almost everything. There are plastic combs, plastic baskets, refrigerators, motorboats and so on. Because the informal sector has exhibited a high degree of resilience, it is now admitted particularly in Africa that this sector may actually be the savior in unemployment. Apart from this role, the sector serves a wider section of society made up mostly of the poor and could probably pave the way to industrialization. This last point is important because a survey of this sector by the African Development Bank (1997:119) reveals that the sector does not only help to integrate marginalised elements of society by making better use of human energy and initiative, but it can also act as a breeding ground for entrepreneurs.

In Uganda, the emergence of the informal sector as an important part of the economic system is more recent and gained prominence in the 1970s, a time when the concept "informal sector" was beginning to appear in the published literature. Its magnitude increased in the 1980s and 1990s, mainly due to retrenchment in the civil service, layoffs in the public enterprises, demobilization of soldiers, the freeze on public sector employment, the growing culture of doing something else "to make ends meet, the increasing number of semi-skilled people from technical colleges without formal employment and the government policy of encouraging people to become job creators themselves. These and other reasons have contributed to the growth of the Informal Sector in Uganda. The once negative attitude is also changing in favour of the sector since it has continued to expand. Therefore, the lack of sufficient knowledge about it and its information needs and uses can actually be attributed to its newness and complexity.

Moreover, the modern sector's expectation that the informal sector would wither and die has also been disproved. Contrary to this popular belief in economic circles, at least in the Ugandan context, the informal sector is actually growing faster than the formal sector. It is more vibrant, absorptive, and adaptive according to the whims of the market.

The significance of this problem could be discussed from the basis of the reasons why people and organizations need information. As stated in Section 1.1, individuals and organizations need information not for its own sake but for the purpose of doing something else, such as making decisions, and choosing what to do. The "what to do" part is the most important in this study because as the sector grapples with its activities, it needs information for different purposes such as markets, supplies, government policy towards it etc. It therefore needs information that supports its effort to consolidate, accelerate, and expand.

Finally, while the problem provides justification for the study, the expected outcomes are equally important. The study is therefore diagnostic, and also prescriptive. On the one hand, it intends to define the information needs and uses of the informal sector, while on the other, it attempts to prescribe measures to address the problem of information needs.

Indirectly, this study also expects to reap other benefits. These are discussed briefly from personal, institutional, national, and international perspectives. In the first place, research is part of the education process and academic achievement is one of its outputs. Therefore, this study is a means of attaining or fulfilling one of the dominant needs of life, that is, higher education. Education has created a credential-oriented society. Education enables people to live in a professionalized society. As faulty as "credentializing" and documentation might be, society equates higher education with earned esteem. The social goodness or utility of this circumstance brings more opportunities to the researcher. By recognizing a unique opportunity in the informal sector and selecting a topic of research in that area, the researcher intends to expand his theoretical base and analytical horizons. The attainment of higher education

qualifications in the fast-growing field of information science implies intellectual progress, and with it comes career growth and development.

The second reason related to the first one and is derived from social responsibility. The study of information needs and uses involve a sociological study of society's state of knowledge and systems. The system in question relates to social arrangements clustered around the processes of knowledge production, organization and storage, distribution and use. The knowledge system of the informal sector in Uganda has never been understood very well. By taking interest in this area, the researcher is poised to build up a body of value-added knowledge and skills that is essential for employment. This study is an opportunity to strengthen his teaching, research and publication capability. In the 1980s, Dick (1982:19) highlighted this point, arguing that for a person working in a university or a research institution, knowledge is effectively a commodity. A researcher gathers or "mines" ideas and information in order to survive and advance economically.

From the institutional perspective, the third motive devolves from the second, that is, job satisfaction. Majoring in information studies, an area that is still untapped in Uganda, and using that knowledge to contribute to the education of others, is one way of gaining self-satisfaction. Gratification as a dividend of success is an important element in improved performance.

From a national perspective, this study is important. Nations are what they are because of the cultures of their people and the national ethos. Because cultures are rich and diverse, they are often portrayed through items people make and use. These items, in developing countries, are made by the informal sector. The study of the information needs and uses of the informal sector in Uganda therefore provides a unique opportunity of integrating into this study information and knowledge about the nature of the cultures of the Ugandan people. The cultural perspective is included in the study in order to promote understanding of Ugandan cultures.

As a country, Uganda needs development ideas or proposals. One of the ways of getting them is through academic research. The value of a project, including an academic project, can be judged from the contribution that it makes to the target population. This study is motivated by the need to generate ideas that will be used to alleviate information problems in the informal sector in Uganda. In that perspective, the study of information needs is driven by the desire to design an information system for the informal sector enterprises. In addition, this being a national study, its value lies in the information that the providing agencies could use or may need to use for planning an information system for the sector. Getting a funded project out of this study was a significant motivation for the study.

Information needs and information use falls within the scope of user studies. This field is a growing area of research in Africa. A critical review of past and current research indicates that most studies have been and continue to be conducted outside Africa. As a result of these studies, the information needs and uses and information seeking patterns of people in those countries have been addressed. Appropriate information systems have been established. This market driven approach to information provision has as a result contributed significantly to the reduction of information poverty among such nations. In Africa, it is observed that most researches have been conducted in Southern and West Africa. This shows that there is an information deficit about the information needs and uses in the regions not mentioned. An information deficit could automatically be associated with information poverty and, consequently, a very slow development pace in the region. Information deficits are not healthy in the information driven economies of this millennium. This could explain why in some countries, the existing information systems are not responsive to the needs of their users. Added to that could be the implication that the scarcity of reliable information is directly related to the slow development in such countries. This study is equally important in that it is a humble contribution towards the understanding of the nature of information users in Uganda, as well as knowledge growth and information system development.

From the international perspective, nations and their people make the world. National level studies such as this play a significant part in contributing to the deeper understanding of phenomena studied much more than the aggregate international studies. The main interest in a study on a national scale is situated in integrating the findings into regional and international studies. This study is also concerned with making the information map of Uganda available to other researchers and to provide a basis for comparative studies in the same field for other researchers in different countries.

1.5 Assumptions

Assumptions are guesses, expectations, or suppositions that the researcher makes as a prelude to the study. They are the values and beliefs held by the researcher about findings from other studies. Precedents that help in making statements of what is believed guide assumptions and observations or data will support this. They help in shaping the direction that the current research takes and are usually required for data analysis and conclusions. In this study, assumptions are made that there are institutions and organizations that serve the informal sector with information and that the informal sector entrepreneurs use them to their advantage in seeking information. These institutions are listed below.

1.5.1 Information

Due to the importance of information in human development, this study is based on the premise that information availability and access are critical factors in determining the success of the informal sector in Uganda. The main thesis is that the intelligent assessment of information needs and meeting those needs is the seedbed of entrepreneurial development. The information needs under consideration here are *appropriate information needs*. The appropriateness of information is viewed from at least seven standpoints advanced by Gorman (1983:48), i.e. appropriateness to the required purpose (planning, problem solving, technology transfer); appropriateness to the user characteristics, including such factors as educational background, intellectual standards, language ability, and presentation format; appropriateness to the environmental application (i.e. rural or urban areas, information handling capabilities, cultural factors); appropriateness to the medium of information transfer, whether through personal

interface, mass media or documentary sources; appropriateness with respect to quality (analytical depth, degree of imprecision or error allowable); appropriateness with respect to time of availability of information; and appropriateness with respect to the economics and cost of access and usability. In addition, of course, is the need for efficient and effective usage of information. These factors are in line with the six characteristics of relevant information which, according to Lucey (1991:15-6) include: timing, appropriateness, accuracy, detail, frequency, understandability. This study therefore aims at establishing how the informal sector or micro-enterprises and small businesses in Uganda acquire and use (or do not use) information, and whether good use of such information resources is in any way related to their business success. Success is measured here as the stability and growth of business, profits, increase in the number of employees, competitive access to markets, and quality product development. The study examines the relationship between information needs and information seeking behaviour as well as access to information within the informal sector. It also identifies information gaps that exist in the sector and suggests possible solutions to information problems for the sector. However, it is deemed necessary to first discuss the contextual setting of the study.

1.5.2 Public Libraries

It is assumed that public libraries provide, or should be able to provide, information services to the informal sector in Uganda. This assumption is based on the knowledge that existing public information institutions, especially public libraries in Uganda, serve as sources of information for the informal sector.

1.5.3 Institutions

Many of the informal sector activities require specialized and technical knowledge. It is expected that the sector acquire its information from government technical institutions such as polytechnics, colleges and institutes.

1.5.4 Departments and organizations

Establishing businesses require information about capital, markets, raw materials and labour regulations, among others. This means that the informal sector in Uganda could

be obtaining its information from the Ministry of Commerce, Trade and Industry; the Department of Labour in the Ministry of Gender and Social Development; the National Organization of Trade Unions in Uganda; from the Uganda Small Scale Industries Association, the Uganda Manufacturers' Association, and the Uganda National Federation of Informal Sector Associations.

1.5.5 The public and public places

The informal sector operates as part of the Ugandan society and therefore, society has a certain influence on some of its activities. This study speculates that the information needs of the informal sector are realized from the public and especially from friends, relatives, village markets, places of worship, tele centres and resource centers, gatekeepers and so on.

1.6 Aim of the study

An aim represents the ideal and indicates the direction of the research. It is the aim that is translated and operationalised into a set of objectives. Broadly, the study seeks to identify the information needs and uses of the informal sector in Uganda.

1.7 Objectives of the study

Objectives are steps along the way of achieving a solution to a problem. They derive from the aims of the study. But unlike goals, objectives are specific, measurable, achievable, realistic and timely. Objectives represent the expected outcomes of research activities. Their role is to guide action and therefore, are precise statements of intended activities that the study employs to achieve the set aims of the study and must be fulfilled within a defined time frame.

To achieve the stated aims, the study sets out to:

- i. establish, categorize and document informal sector activities in Uganda with particular attention to information services,
- ii. determine the business characteristics of the sector,
- iii. find out the beliefs, customs, opinions and influence of the sector on the lives of Ugandans who rely on its products,

- iv. establish how the sector acquires information,
- v. identify and document types, sources and channels of information used by the informal sector,
- vi. establish methods used by the sector to acquire information,
- vii. identify information systems and services used by the informal sector,
- viii. establish the role information plays in the activities of the informal sector in Uganda,
- ix. determine the impact of information access, exploitation and use in the growth and development of the informal sector in Uganda,
- x. find out the problems that the sector faces in accessing information that it requires and currently uses,
- xi. explore factors affecting the information flow and exploitation by the informal sector in Uganda,
- xii. suggest theoretical and practical solutions to fill the information gap, and
- xiii. compile data on the information needs and uses on the informal sector in Uganda for future reference, research, teaching and professional services.

1.8 Research questions

The study makes use of a combination of both qualitative and quantitative research design. The justification for the choice lay first in the kind of demographic and business characteristics assessment of the informal sector that lent themselves well to quantitative methodology. In the information section of the interview schedules there were open-ended statements that lent themselves to the qualitative methodology. It was a survey study that required no hypothesis testing (Huysamen, 1994:97) but used research questions instead.

The research questions were derived from the objectives of the study. Each objective had a set of specific questions seeking answers. Therefore the main questions were formulated together with sub-questions and presented as follows:

1. What is the nature and scope of the Informal Sector in Uganda?

2. What is the type and scope of the business unit?
3. What are the information needs of the Informal Sector?
4. What information systems and services does the Sector use to acquire and access information?
5. Does information in any way play a role in these businesses?
6. What problems does the Informal Sector face in accessing information?
7. What in the opinion of the Sector could be done to solve the problem of its information gap?

1.9 Scope and limitations of the study

Scope is about how much space a study can cover. It describes the slant the study takes to attain its objectives. Limitations are restrictions that may be imposed on the study. They could be internal to the person undertaking the study, they could be imposed by the external environment, or could arise out of the type of the study. This section presents the scope and limitations of the study.

Time was restricted both in scope and limitation. The time scope was limited to 4 years within which to complete the study, that is, by the year 2002. A detailed work programme or research timetable covering that 1999-2002 period was agreed during the preliminary stages and followed judiciously up to the completion of the study. The time frame was calculated according to the research tasks to be done. The detailed budget of activities is reflected in Appendix H. The time limitation was imposed by the length of the interview schedule and also by the time respondents were willing to spend on the interview. Some respondents were quick and some were very slow. The slow ones would cause failure to interview the next respondents.

The study was conducted at a time when presidential and parliamentary political activities were going on in the country. This caused failure to carry out a full census of informal businesses in all study areas as was planned. It also created a great deal of doubt among entrepreneurs if the researcher was not connected to particular candidates. In such

instances it created false hope for money among some respondents who thought that it was the right opportunity to “eat” from politicians.

Uganda is a diverse country with 56 local languages. Whereas the researcher was able to use the local language in the pilot district, he could not do so in the other districts. He relied entirely on his research assistants to interpret difficult concepts in the interview schedule and had to derive the meanings from the way they understood it.

The grounding of the study was based on three foundations. The practice model was developed from three sources, namely theory as a source of evidence, the research being implemented and personal experience (Grinnell, 1988:527-528). The reason for relying on theory was that theory organizes data in a way that promotes understanding of the subject and provides a basis for action. This research in itself was valuable. It provided an opportunity to explore the sector and, to establish its information needs. It also enabled the study to establish the nature of the sector, what people felt about it, the role and impact of information on the sector, the mechanism the sector uses to exploit information resources and services, and problems that the sector experiences in information access and utilization.

Wisdom lies in experience. Therefore personal experience was useful to this study in that the investigator relied upon it to interpret what he saw and found relevant for this study.

1.10 Significance of the study

The importance of a study is judged from the contribution it makes. This study was undertaken principally to make its contribution to whoever finds it useful but more specifically the solving of the information problem in the informal sector. This section will discuss this significance from several standpoints.

1.10.1 Information services

It has been established from this study that the information systems and services in Uganda do not cater for the entrepreneurs of the informal sector. Such systems are few

and have not been marketed adequately where they exist. Furthermore, they do not have relevant information materials to offer informal entrepreneurs, they are not coordinated and therefore there are no benefits that networking could bring. The study creates the basis for a sector information system and service within the framework of National Information and Communication Policy.

1.10.2 Library and Information studies theory

One of the problems of African librarianship and information studies is the significant scarcity of local literature. Much of the teaching and research material available in libraries of the institutions that train information workers is imported. Best practices from foreign countries need adequate comparative local literature. The study therefore contributes in some way, information for the purposes of teaching, research and general knowledge.

1.10.3 Library and Information Science profession

The LIS profession in much of the developing Africa is very fragile. The information profession is scattered. Information professionals in many countries do not yet know the extent of their profession. Research into the information requirements of various target groups in their societies is severely limited. Professional associations, where they exist, are very weak. Most information professionals know information institutions basically as libraries, archives and records centers. This study breaks new ground and challenges information professionals to avoid recycling research in developed institutions and to venture into various segments of their societies in order to develop ideas that are needed to plan for an information society.

1.10.4 Library and Information Science practice

This study has identified that the formal information institutions (libraries especially) have not been viable in societies where oral culture is predominant. What are the implications for the LIS practitioners? The challenge is for the professionals to think creatively and to develop best practices for capturing and storing useful information that is frequently shared by the word of mouth. In this way the study has contributed to the

understanding of the problem that could be wider and more serious in other countries as well.

1.10.5 Library and Information Science research

As mentioned earlier in this chapter, most of the information-based research has been (and is still) going on in developed countries. The publication pattern of the research findings remains the same. In Africa, West and Southern Africa tend to emerge rather prominently. Very little is known from North, North East, and East Africa. The implication is that African professionals have little chance of reading works by fellow researchers on the continent knowing very well that libraries are incapable of subscribing consistently for journals. This study, by publishing its findings in peer-reviewed journals, highlights the need for African professionals to research aggressively on the African information environment and to publish widely.

1.10.6 Teaching and learning

Changes are taking place in almost every field of endeavor throughout the world, including information science. The changes that are taking place in the information environment must be recognized and appreciated. The training curriculum must be open to review and revision to cater for the changing information environment (Odini 1999:103). Therefore, to take into account what this study has done, will require integrating it into the curriculum of the East African School of Library and Information Science at Makerere University, Uganda. Secondly, *teaching and learning in information science is a new direction that focuses more on information users than on the information institutions*. Therefore, to implement the contents of this study, and specifically the strengthening of the content of the information science, this study contributes information to the teaching and learning of cognitive science as part of the information science.

1.11 Organization of the study

The thesis comprises three parts. Part One covers the preliminary matter. Part Two, consists of is the main body (chapters) of the study. Part Three is the Back Matter.

The Preliminary matter contains elements that include: Title page; dedication; declaration; acknowledgments; list of tables, figures and maps; abbreviations and acronyms; the Abstract, and the Table of contents.

The body of the thesis is made up of ten chapters that are presented systematically. Unity of thesis is achieved by using forward and backward linkages between chapters.

Each chapter is a sub-unit of the entire study and deals with specific themes but within the framework of the study. Each theme is broken down into sub themes to allow for a deeper and broader treatment of the subject matter.

The Back Matter includes References and Appendices. References are citations of works used directly and indirectly in the study. They include books, chapters from books, journal articles, government documents, technical reports and monographs. It also includes conference and workshop proceedings (published and unpublished), grey literature, dissertations (published and unpublished), personal communications, minutes of meetings, information from databases and database hosts such as: Smallbiznet, Ebsco, Library Literature, Library and Information Science Abstracts (LISA), INFLANET, and OCLC.

The Appendices are the attachments such as photo exhibits, letters of authority, interview schedules, and observation schedules and verbatim transcriptions of respondents who were interviewed.

Chapter One is the Introduction and background to the study. It presents the conceptual and contextual settings of the study. Background to the research problem; the statement of the research problem; motivations for the study; assumptions underlying the study; the aims and objectives of the study; the scope and limitations of the study; the significance of the study; the research questions, and the summary of the chapter are presented.

Chapter Two describes the informal sector in Uganda. Background information about Uganda includes a qualitative description of the peoples' beliefs, customs, and influence of the informal sector on the lives of people. The historical development of the Sector in the country is explained in this way.

Chapter Three describes the Information sources, systems and services in Uganda. It highlights the existing information providers as a basis for finding out whether, or not, the informal sector uses them.

Chapter Four presents the Conceptual Framework adopted for the study. This chapter defines the concepts from the operational viewpoint. It provides a diagrammatic road map of the process of identifying the information needs and uses of the informal sector of Uganda.

Chapter Five deals with the Information needs, information seeking behavior and information use. It also contains a literature review. This is a survey of the available literature and current research. Attention is paid to the existing theories of information and how they apply or relate to the informal sector and small businesses. The chapter also explores and evaluates ideas, methods, systems and models by which the informal sector or micro- and small enterprises have been provided with information in other parts of the world. The theoretical framework emerging out of this chapter provides a basis for designing or adopting a model of information provision for the sector in Uganda.

Chapter Six describes the research design and methodology. A detailed explanation is provided about the study design, the area of study, the target population, how the sample was selected and its size, the research methods, the research instruments and the procedure that was used in conducting the study.

Chapter Seven presents the findings resulting from the main instrument, namely the Interview Schedule.

Chapter Eight presents findings resulting from other sources. These sources include: responses from organizations, informants, notes from observations, photographs and a transcription of voices taped at the interviews.

Chapter Nine presents consolidated findings from all the instruments employed and discusses them. The purpose is to gain a holistic view of the information needs and uses, the problems, and the insights from the study.

Chapter Ten provides the summary and the conclusion to the study, then suggests an information model (system) to address the information needs and uses of the informal sector in Uganda. It also presents recommendations for further research and proposals for further funding.

Chapter Eleven is about a conceptual model for providing an information system and services for the informal sector in Uganda.

1.12 Summary

This chapter supplies the basis upon which to study the information needs and uses of the informal sector in Uganda. It describes the conceptual setting that underscores the importance of information as a resource. It discusses the root of the concept “informal sector” and its development during the last thirty years. Factors leading to the establishment of the informal sector in Uganda are described. It is noted particularly that up to recent times little was known about the sector nor had any audit of the sector been undertaken. Consequently there was an information gap about this sector, which led to little attention being paid to it. Emphasis is placed on the sector’s contribution to the GDP and employment creation. The lack of knowledge about a rapidly growing sector provided the impetus for the study.

The aim is to learn as much as possible about the nature of the sector, its characteristics and complexity, and to identify its information needs. Furthermore, the study intends to establish the sources of information used by the sector, the purposes for which the information is used, and the problems encountered in securing that information. The chapter provides the research methodology used in conducting the study. The value of the study is situated in its potential usage by the country’s authorities and other stakeholders, towards the development and improvement of the informal sector in Uganda. Evidently there is a lot that needs to be done but it requires mostly, the will to do it and it can be done. The research questions given at the end of the chapter provide a concise outline of what information would be sought. Also provided is the structure of the entire work upon completion.

The next chapter, Chapter Two, provides background information about Uganda, the country of study and an analytical or qualitative description of the informal sector in the country since the earliest times. It defines the characteristics of the informal sector and discusses the role and impact of various people and regimes within it. The chapter also

looks the ancient history of the sector as a cultural institution that was held in esteem by its founders. The role of Europeans, in particular, is noted for suppressing the growth of this sector through several mechanisms designed to blackmail its founders and highlight their own contributions. The role of the government in the sector since independence has also been articulated and factors fueling the growth of the sector in present times have been expounded.

CHAPTER TWO

THE INFORMAL SECTOR IN UGANDA

2.1 Introduction

The present chapter examines the growth and the development of the informal sector in Uganda. It describes the geographical, historical and social economic settings of the country and the way in which they have influenced the nature of the informal sector. The evolution and growth of the informal sector as it is linked to the broader, formal economy is also examined. The chapter is motivated by the third objective of the study, namely to *examine the beliefs, customs, opinions and influence of the informal sector on the lives of Ugandans who rely on it.*

The information and data required for this chapter were obtained from different sources using multiple study methods. Documentary research was conducted to gain an understanding of the history, nature and growth of the informal sector. Most of the documents that were examined include government policy documents, annual reports, theses, bibliographies and occasional papers that were accessed from government departments, libraries and resource centers. Visits were paid to relevant institutions that preserve creations of the past including the informal artifacts. Field visits to sites where informal activities take place and observing what goes on in these places was done. Sites visited included fish landing sites, metal fabrication and artisan workshops, garages, woodwork, quarries, brick making, charcoal burning, food processing sites, art and craft shops and craft making places, tailoring units, transport and social services concentration points.

2.2 The Country

Uganda is an independent sovereign state situated astride the equator near the centre of Africa. It is completely surrounded by other countries; in the north by the Sudan, by Kenya on the East, while in the South is the Republic of Tanzania. To the Southwest is Rwanda and the western border is shared with the Democratic republic of Congo (formerly Zaire). The country stretches about 400 miles (640km) from north to south and

350 miles (560 km) from East to West. It has a total area of 93,981 sq. miles (236,000 sq.km.) of which 16,386 sq. miles (40,355 sq.km.) is open water and swamp. It has innumerable rivers, relatively high altitude.

The Map of Uganda on the following page shows an expanded version from the map of Africa.

MAP 1: Map of Uganda

2.3 The Socio-economic setting at independence to the present times

After gaining independence from Britain in 1962, Uganda inherited a western economic system. The natural economy and specifically the informal sector were almost non-existent. The economic system established by the colonialists continued into the post independence era.

The 1962 Constitution in Article 22 provided that, no property of any description could be compulsorily acquired, but in case of appropriation, adequate compensation was to be given to the investor (Constitution of Uganda, 1962:22). Article 13 of the 1967 *Republican Constitution* (Constitution of Uganda, 1967:9) made a similar provision. To consolidate this position, another law, the Investment Protection Act and the Industrial Charter 1964 (chapter 160) promised the approved investors of necessary materials or equipment and the imposition of import duty against competitors. Article 13 of the 1967 *Republican Constitution* (Constitution of Uganda, 1967:9) stated the similar provision. These protection guarantees suited the recommendations made by the World Bank (IBRD, 1962:38).

To consolidate the monopoly gains, the *First Five Year Development Plan*, (1961/62–1965/66) is silent on the ‘informal sector.’ The strong influence of the western economic system inherited from Britain skewed it. Yet the gains from the informal sector made the country to have one of the best economies in Africa at that time.

The *Second Five Year Development Plan*, “*Work for Progress*” 1966/67 – 1970/71 aimed at transforming and expanding the base of the economy, and at doubling income per head. This plan emphasized the industrialization of the economy and foreign investment had a key role to play in the future, as it did in the past (p.i- ii). This was done to promote good relations and to secure mutual benefits (*Work for Progress*, 1971:16).

It is against that background that, in the 1960s, Uganda's economy was among the best in the whole of sub-Saharan Africa (sSA) (*Work for Progress*, 1971). The Gross

Domestic Product (GDP) grew at about 5% per annum. Besides rapid agricultural growth, Uganda had a relatively developed manufacturing sector and a good transport system. The country's Balance of Payments (BOP) was positive. Exports were relatively diverse and the trade regime was more or less liberal. The macro-economic performance during 1960-1970 showed domestic investment growing at 7.5% with private capital at 5.65% (Abuka, 1993:2). Government deficit did not exceed 2.5% of GDP. Inflation never exceeded 10% (Alani, 1995:12). Under this plan, the informal sector is mentioned only as miscellaneous manufacturing, i.e. numerous small projects that do not neatly fit into any formal classification (Work for Progress, 1971:87)

However, during this plan the cost of living, which was relatively stable for many people in 1966-68, rose steeply in 1969 to 1971. The Government responded to the problem by fixing prices for minor crops, which included maize, onions, tomatoes, millet, beans, groundnuts and sorghum (S.I 23 of 1971, 93 of 1972 and 95 of 1972), and by creating the State Trading Corporation (STC) and the Produce Marketing Board (PMB) to oversee "correct" distribution of essential products and goods. During the period of shortages, hoarding practices began; prices rose sharply and the peoples' conditions worsened. In May 1970 Uganda passed an economic policy, "The Common Man's Charter and Nakivubo Pronouncements" in which the government expressed interest in acquiring 60% of the majority share in the capital of most private companies. As a result, the private sector lost confidence in the security of their investment in Uganda (Nakivubo Pronouncements, 1970:42-43). Consequently private capital investments and imports declined. To mitigate this problem, the Military Government reduced its share from 60% to 49% – a step that once more restored confidence in the economy.

In the *Third Five-Year Development Plan 1971/72-1975/76* the government recognized that there were many Ugandan enterprises engaged in small-scale activities like furniture making, garment and shoe manufacturing, and in maize meal production in towns and trading centers. It decided to carry out a study about its scope for the expansion of small-scale industry. It also acknowledged that given the apparently larger

numbers involved, Government's ability to reach a substantial proportion of this sector would be extremely limited. This partly explains the complexity of the informal sector and the root of government failure in developing the sector.

In 1972 the Military Regime declared an "Economic War". Asians were expelled *en mass* from Uganda. This provided an excellent opportunity for Amin, the President, to award business to loyal officers and civilians. As the military dictatorship tightened its grip on the country, the social and economic development deteriorated. Uganda was isolated internationally. Technical assistance ceased. Uganda paid for her imports in advance. The departure of enterprising Asians created managerial and technical deficits. It deprived the country of vital managerial, entrepreneurial and technical expertise critically needed by the public and private sectors. The net effect was that production fell drastically and the revenue base declined (Alani, 1995:14).

From 1973 onwards, other factors played part in worsening Uganda's economy. Coffee prices nose-dived in the world market, the oil shock took its impact, a shortage of raw materials and spare parts for the import-dependent industrial sector and a general reduction of imports exerted pressure on domestic prices. The deficit climbed to 9.5%. Money supply increased by 30% between 1971-1979. The domestic rate of inflation reached 35% between 1971-1980. Practically all indicators of economic activity showed a downward trend with some worsening in 1978/79 because of the liberation war. With the departure of Asians and a decline in the economy, fertile ground was prepared for the growth of the informal sector as it is described below.

During 1977/78 – 1979/80, the Military Government again launched the *Three-Year Action Programme*. Under this plan, Government recognized that there were thousands of cottage and small-scale industrial establishments in Uganda. Because of this magnitude, it created the Ministry of Small Scale Industries to promote the development of these industries in Uganda (p.117) Workshops for training were opened. These included the Jinja Raincoat Workshop, Masaka Cloth Printing Workshop, Kireka Umbrella workshop and the Mbale Canvas Workshop. The Government also assisted

and stimulated the development of cottage and small scale industries through the activities of line ministries of Culture and Community Development, Labour, and the Management Training and Advisory Centre (MTAC).

The poor performance of the economy resulted in "black marketing" or "*magendo*", price controls, poor financial performance, ineffective tax administration and revenue collection and an overvaluing of exchange rates (Barigye, 1995:10). By 1981 inflation had risen to over 100% per annum. Growth of exports stood at a negative 1.9% while that of imports grew at the rate of 3.2%.

The early 1980s were a period of economic recovery based on Structural Adjustment Programmes (SAPs). SAP is a package of policy measures undertaken by governments to correct the imbalances in the economy so as to achieve a balanced budget; improve BOP position, increase productivity; and cause efficient allocation of resources in their respective markets for sustainable growth (Onyaa-Olaa, 1993:2). The main areas of adjustment included:- mobilization of domestic resources through fiscal monetary and credit policies; improving the efficiency of resource allocation and use by public sector; reform of the structure of economic incentives; and institutional strengthening. The SAPs were abandoned in 1984 and only to be reintroduced in 1986.

In 1982 the government announced the *Recovery Programme*. In this programme of 1982-84 (44-45) Government once again recognized small-scale industries. In this plan a directorate of small-scale industries was established to plan, direct and implement the small-scale industry programme. Meanwhile the Ugandan economy was worsening. This situation resulted in the World Bank Structural Adjustment Program (SAP). And because of the civil war between 1983-1985 the Uganda economy reached its lowest levels forcing Ugandans to another era of illegal activities like speculation and hoarding. Illegal activities notwithstanding, people began "opening their eyes" to do things beyond those they normally did resulting into the firm establishment of the informal sector.

During 1987, Government presented the *Rehabilitation and Development Plan 1987/88 – 1990/91*. The main objective of the plan was the rehabilitation and reconstruction of the economic and social infrastructure in order to restore the productive capacity of the economy (p. iii). In the context of the informal sector, the plan intended to harness existing indigenous scientific capability intended to adapt appropriate technology for the development sectors. Particular attention would be paid to involve artisans, technicians and professionals in technological development (1987:21)

During the second *Rehabilitation and Development Plan 1991/92 – 1994/95* no new proposals were mentioned for the informal sector. It would appear that the earlier plans had not been implemented. However, during the midterm of that plan, the Government announced the *Rehabilitation and Development Plan 1993/94 – 1995/96*. The main goal was to lay the foundation for broad based economic development and sustainable reduction of poverty (p. i). In private sector development, the main thrust was toward creating employment to contain pressure from laid off labour. The plan recognized a low level of technology resulting in poor quality and non-standard output. For this purpose it put in place a range of approaches such as using the Uganda Manufactures Association (UMA) and Uganda Small Scale Industries Association (USSIA) as implementing agents for the provision of technical assistance, training information and network development and improving marketing strategies (1994:30). In addition the government created the Micro and Small Enterprise Policy Unit (MSEPU) at the Ministry of Finance, Planning and Economic Development. In the private sector a national NGO, the Private Sector Development Foundation was founded in 1997 to address the similar problems.

The purpose of reviewing briefly the socio-economic background is to explain the fact that the informal sector is an economic issue. Its growth is connected with political governance that, in turn, directs policies that affect the performance of an economy as a whole i.e. the formal and informal sectors existing side by side. Both are a product of one economic system. It is seen as representing one pole of a continuum, that is, it is

postulated as being part of the whole economic system and therefore linked to the formal system (Harding and Jenkins, 1989:51).

2.4. The Growth and development of the informal sector

Hart (1970) introduced the concept of the informal sector in a study distinguished between wage earning opportunities and self-employment in Ghana (Haan, 1989). The International Labour Organization (ILO) in 1972 popularized this concept in a landmark study of Kenya's employment opportunities (Turnham et al, 1991). Recognizing that the informal sector is important to the well being of a large segment of Ghana and Kenya's populations, many organizations such as the World Bank, the ILO, governments, the private sector and individuals have been keen on conducting studies about it in different places and for different purposes. No exact definition has emerged. What holds are the descriptive characteristics of the sector. It is the characteristics that one comes to understand what the informal sector is.

However, the informal sector is known by different names in different parts of the world. In the first place the concept 'informal' presupposes the existence of the 'formal.' Its use is relative. In English language, informal means conducting or carrying out without the formal regularly prescribed procedures. The regularly defined procedures are formalities like registration, taxation, licensing, and operating in formal institutions like factories, stores or shops.

Because the informal sector operates outside such formalities, it has attracted many names, some of them tending to describe it as an objectionable system. Yet it fulfills the role of a necessary "sponge" in economies with high unemployment rates or a limited formal sector. The following summarizes the various terms by which the sector is known by various people:- Unofficial, parallel, undeclared, concealed, creeping, clandestine, alternative, marginal, independent, submerged, invisible, illegal, unobserved, fraudulent, hidden, submarine, secondary, underground, dual, secret, black, irregular, veiled, peripheral, shadow, informal, disguised, gray, counter-economy, wangling economy, and "lower circuit" of the urban economy (Karl, 2000:54). Portes (1978:35-40) describes it

as that part of the urban labour force which falls outside the organized labour market, the formal sector. Feige (1980) defines it as "... the hidden economy" while Sethuraman (1981) calls it the "sub-terranean economy" that escapes taxation and the underground "economy" of the industrialized world. Van Dijk (1986:26) experiences the Informal Sector as a "transitional economy" in the sense that it serves as a stepping stone to capture a job in the formal market. Fitzpatrick (1988:367) describes it as an "essentially alternative system; an enclave of the formal system." Fitzpatrick (1988:179) regards it as "essentially alternative and resistant to the formal system," while Portes, *et al* (1989) says that it includes activities that operate largely outside the system of government benefits and regulations. It is called the "black economy" in Bangladesh (Reza, 1989:23-4). It is also conceived of as a "marginal" system (Laguerre, 1994:4) and a parasitic system (Laguerre, 1994:5). With such a "pool of names" that have been referring to it since the concept was introduced, it has proved impossible to translate the above notions into a generally acceptable, consistent and usable definition (Hacin 1989:5). However, in recent times the informal sector has assumed other names such as *Jua kali* or *Nguvu Kazi*. These names derive from the Kiswahili words. *Jua Kali* means the "hot sun". *Jua* is the "sun" *Kali* meaning very hot. As an East African (Kenyan) phrase in the context of the informal sector, *Jua Kali* is a colloquial name given to enterprises operating informally and mostly without shelter or in the open air. Tanzania is promoting the word *Nguvu Kazi*. '*Nguvu*' is a Kiswahili word for strength while '*Kazi*' means 'work'. Translated into business, it refers to activities that require a lot of energy. The English version is the **Informal Sector**. It should be added here that a poor understanding of the definition or extent of the "informal sector" which is not widely supported leads to misinterpretation and misrepresentation, which generally bring with them mistaken rejection. For instance some see the sector as representing that area of the urban economy that evades state monitoring (Gbossa, 2000:77). However, Gbossa concludes that although the informal sector involves tax evasion, a sizeable number are taxed on estimated incomes. The reality is that Government has not worked out the mechanism for doing so. Again to say that it is an underground economy, hidden, subterranean, illegal, fraudulent etc. brings disrepute to the sector. The informal sector in Uganda, like in other African economies is visible, dynamic, and operated along side the

formal sector and in broad daylight or in the open. It is perhaps important to demarcate the reality here by dividing the licit and the illicit informal sector covering activities like smuggling, money laundering, drug trafficking all of which are criminal in nature. This study considered only the licit, verifiable, observable activities only.

From the above, it becomes clear that there is no universally accepted terminology other than the fairly representative term "informal sector." This is because the enterprises or units that fall under this sector are so many that each would merit a separate terminology. After reviewing available explanations and phrases it is clear that the sector is identified by many titles and according to the way individuals feel it should be called. Some names have negative connotations while others depict the real conditions under which the sector operates.

The proponents of terms with negative connotations do not appear to give the sector names using western economic standards such as capital intensive, advanced production and organization techniques. In describing the informal sector, they rather choose terms that are normally used to describe the illicit trades. This is a mistake. African people, on whose land the informal sector is mainly found, use the conditions approach to describing the sector. This means trying conditions under which its operators are working. Even so, it is clear that the informal sector is still very much like Professor Han Singer's giraffe, which everybody recognizes but nobody is able to define accurately (Haan, 1989: 11). He concludes that although single variable definitions are attractive, a composite term would lead to a better demarcation of the reality. This would involve spelling out characteristics of the sector. This argument is acceptable. Accordingly, the informal sector is one that can be recognized by the characteristics that suggest its functions, as described in section 2.4.2

In Uganda, the sector comprises several business ventures and several pseudonyms to itself that no name has ever evolved. This in itself is an information deficit that transcends all literature. The Government of Uganda defines this sector in terms of employment, and investment ceilings. It states that the informal sector comprises micro

enterprises, employing less than five people, the value of machinery, tools and equipment are below US\$2500 and the annual turnover is also below US\$10,000 which is the threshold for business tax.

2.4.1 Composition

Knowledge about all types of trades constituting the informal sector in Uganda is still limited. However many studies have underscored the heterogeneity of the 'informal sector.' This sector employs males and females, including adults, youth and children; the literate, semi-illiterates and illiterates; able and disabled people, and the rural and urban people alike. In this way the informal sector's activities encompass an extraordinary variety of skills and knowledge often outside the boundaries of formal education (University of Sierra Leone, 1991: 1).

In order to provide information on its composition in Uganda and to identify more homogenous groups for analytical purposes, several taxonomic classifications exist. Classification can be done by type of output, e.g. agro-based resources, utility-based, or skill-based. It can be done by market orientation, e.g. household market, industrial market, or by geographical orientation. For ease of reference the classification used here is based on economic activities. These include:

- **Arts and Crafts:** Activities include basketry, mat making, rope making, the making of bags, batiks, pottery, wood carvings, table clothes and bed linings, knitting, commercial art, dyeing, pottery etc.
- **Construction:** Included here are brick and tile making, quarrying, building houses, and wall fencing, masonry, painting, and plumbing.
- **Food Processing:** Preparation and serving of food, drinks and meals in small restaurants, roasting of food, bakery, and related products, including beer brewing and distilling alcohol, as well as grain milling.
- **Garage work:** Activities include: repair of vehicles, motorcycles, bicycles, straightening vehicle bodies, and spray-painting, electrical work and car wiring.
- **Metal work** including metal fabrication, welding and soldering, blacksmithing or

artisan activities.

- **Shoe Industry:** Leather-working activities include making and repairs of shoes, sandals and all types of footwear, and the making of handbags and other leather ware.
- **Social Services:** These include barbers, hairdressing, clothe-washing, car washing, shoe shining, wheelbarrow pushing.
- **Tailoring and seamstress work:** stitching and mending clothes, knitting, crocheting, making of clothes.
- **Technical Services:** These services are not so visible. Operators work in backyards of homes or are itinerant. These enterprises include photography, watch repairing, electrical repairs, electronic (radio, T.V, tape recorders, recorders) repairs and agricultural-related activities.
- **Trade:** Activities include selling of various consumer items like drugs, fresh food, charcoal, firewood, newspapers, books and household items from mixed shop premises, kiosks, market stalls, verandahs and hawking.
- **Transport:** These activities include taxi operation, *boda boda* or cycle transporters, wheelbarrow pushers (carting of goods) and human carriers of merchandise.
- **Traditional Health Services:** This category includes individuals with their roots embedded in the traditional, cultural and social activities of the community. Health services including Traditional Birth Attendants (TBSs), traditional medicines and treatments are an important part of African society.
- **Woodwork:** Includes pit sawing, carpentry, and furniture making, boat building etc. making. (Uganda Manpower Survey, 1989: ILO, 1995:117-118)
- **Miscellaneous services'**
Rubber stamp making, photo framing, shoe shining.

2.4.2 The Characteristics of the Ugandan informal sector

Describing the characteristics of the informal sector is to clarify its nature. Selected characteristics are used to support the emerging consensus that the informal sector is not involved in a set of survival activities performed by people on the “margins” of society. Its activities can be described as a process of income generation and employment characterized by one central feature: it is unregulated by the institutions of society, in a

legal and social environment in which similar activities are regulated. Production units have the characteristics of household enterprises. Labour relations where they exist are based mostly on casual employment, kinship or personal and social relations rather than contractual arrangements with formal guarantees.

The informal activities in Uganda are visible, rampant and found in the rural and urban areas. People of different ages and gender engage in it. The majority of them have low education or none at all and with limited skills. Well-educated people are also increasing in number in the sector.

Since the sector is characterized by routine work involving innovation, imitation and duplication of products and services the artisans acquire wide experience, compensating their limited education.

Owners raise the necessary finance at their own risk and are personally liable for any debts or obligations incurred in the production process. Individuals can switch between two sectors during the same working day. Assets belong to the owners. Sometimes sharing or renting of tools is convenient. Enterprises are tiny and informally organized, explaining the low level of organization, with little or no division of labour. Activities are not necessarily performed with the deliberate intention of evading taxes or infringing labour or other regulations or administrative provisions (ILO, 1999:2). Legal status's distinguish them from corporations.

Other characteristics common to most of them are their fragility. They often disband even before achieving their objectives (ILO, 1998: 190). Their "death" rate is as high as they are created. This is not surprising, bearing in mind the characteristics of the operators themselves. They are often more labour intensive in aggregate. They are more widely and highly flexible to changing environments than the formal sector. It employs women, men and children alike. Even some of those in formal employment sometimes take off time to engage in it. The sector provides goods and services to a majority of low-income earners. It makes use of local raw materials using adaptive technology.

The sector thrives because of low division of labour, low incomes, low capital intensity, flexible hours of operation, low level of formal credit, ease of entry and departure. The informal sector is also characterized by a wide variety of employment status's and labour relationships (World Labour Report, 1998:181).

The difference between urban and the rural informal sector is both in form and perception. Those engaged in it in the rural areas do it basically as a means of survival while in urban areas, there is an aspect of future projection. They do not look at incomes only but also as a potential that can last.

Field experience has shown that during the rainy season people are engaged in formal activities and return to the informal ones about ten o'clock in the morning. Rain fundamentally affects the informal sector. Whenever it rains, all outdoor activities are interrupted. This places the survival of the informal sector at the mercy of nature. However, other factors like competition, small markets, and the formal sector also have a negative impact on it.

2.5 The Making of an Economic System

It can be said that bad governance and structural adjustments have been responsible for nurturing the informal sector in Uganda. The economic crises of the 1970s and early 1980s resulting from expulsion of Asians, economic mismanagement and neglect that ensued led to "black marketing" which was commonly referred to as "*magendo*" (Okumu 1994:20; Barigye 1995:10) are among factors leading to the making of the informal sector.

Political instability during the same period 1978-1985 also led to the neglect of agricultural sector and collapse of industries and infrastructure forcing people of various backgrounds to trade. To this day trade, informal trade in the form of petty commodity trade, sale of old items and, hawking and metal work forms a major part of Ugandans informal sector Mamdani in Katabira (1995:15). With small industrial production and peoples' inability to pay for manufactured goods, the Informal Sector re-surfaced

strongly to sustain the domestic economy amidst urban crises and rapid population growth. In fact the case of Uganda illustrates how the Informal Sector has largely sustained the domestic economy by producing agricultural, industrial and domestic implements.

Urban growth in Uganda resulting from rural migration has also created conditions for the growth of the informal sector. Everywhere people are engaged in all sorts of activities to earn a living. It helps explain how the sector in African countries especially has produced its own dynamics and challenges not only at the level of theories but also at the level of policies (Okumu, 1994:1).

The political and economic streamlining in Uganda during the 1990s has contributed to the growth of informal sector. Demobilized soldiers, laid off public employees and retrenchment of civil servants as well as “frozen” vacant positions in the public sector (Ssemogerere, 1996) were some of the factors leading to the growth of the informal sector. Most of the people generated by this exercise have in a large measure gone to informal sector as a means of solving unemployment problem. It also provides an explanation of how the poor manage to survive in the modern economy.

Population growth and urban migration in Uganda is another factor nurturing the growth of the informal sector. Since the sector employs children and adults alike, coupled with the country’s annual population growth on average of 2.5%, all these have given rise to a large vibrant and dynamic informal sector. The informal sector therefore represents the sociological bridge between traditional values and modern entrepreneurship. It provides goods and services rather cheaply and adequately to the low-income earners hence improving their standards of living.

2.5.1 Factors fueling the growth of the informal sector in Uganda

Following the Government’s policy of selling off pool houses and of encouraging people to build their own houses has created a dynamic building industry in Uganda. Demand for bricks, tiles, fabricated windows, and doors, as well as for services such as quarrying,

masonry, plumbing, and painting have grown in all towns and, to a small extent, in rural areas.

Abject poverty is helping the informal sector to grow. Trading in old articles such as shoes, clothes, cars, and new merchandise is *big business in Uganda today*. Low incomes and high cost of new attire is creating a market for the old clothes. Because of the increasing use of old shoes, cobblers are very common.

Because of dusty or muddy roads, shoe shiners are doing well. The return of enterprising Asians has created an “army of hawkers’ who sell new items in buses, on streets, and at stationary locations. The marketing of products is a type of business that is slowly finding its way into offices by itinerant promoters of goods or services. The services of barbers and hairdressers (salons) are always required in the urban areas mostly and in almost every street there is a unit or more for this purpose.

Bad roads and imported old cars have led to a significant number of car washing bays and garages for repairs. Unprincipled importation of old cars have also led to the unprecedented rise in the number of cars. With errant, less qualified drivers and failing cars, accidents are many. This has helped to create businesses specializing in panel beating, spray-painting etc.

Images give a true picture. Itinerant photographers and photo framing has become a distinct commercial activity in urban areas and schools.

Rising school populations are creating a constant demand for metal boxes commonly called “back to school.” Because of expensive toys and children’s cycles, the informal sector fabricators are making imitations of these items. Children, especially in rural areas themselves, fill the gap by making these items locally.

Elegant sitting rooms and bedrooms have created a widening market for knitted and crocheted items like bed linings, chair backings and table cloths. It is important to state

here that middle income earners, especially urban women, mostly require the aforementioned commodities. Other craft items that are much in demand in Uganda include mats and baskets. As carpets are very expensive in Uganda, the alternative option is to use indigenous mats that are much cheaper.

The majority of urban Ugandans cannot afford cookers and refrigerators. They rely on charcoal stoves and pots. Charcoal stove making is a growing trade in all urban areas. Pots are made in rural areas and are ferried to town to be sold. Since they are fragile, broken pots have to be replaced quite often. They are used in great quantities at places where beer is brewed.

Woodwork is expanding. The need for wood products – beds, doors, windows, chairs, tables, cupboards, coffins is never ending. Uganda is running a big risk of desertification due to the speed at which mature trees are destroyed.

A culture of reading is once again developing in Uganda, as witnessed by the spread of hawking and selling of newspapers. The Ugandan press produces over twenty newspapers in many languages, but also topical magazines. In all towns, “paperboys” can be seen running about and selling this product.

Due to the liberalized environment, informal “business companies” of all sorts are being established. An important mark of identity for these “companies” is the name and a rubber stamp to mark the necessary documentation. Stamp making is therefore a growing trade, mostly carried out on the verandahs of the major shops.

Information and entertainment is a form of culture, both in urban and rural areas. The possession of a radio is counted as a big asset and the ubiquity of radios has created a need for repair services. Cheap watches have also flooded the market and watch repairs fall within the aforementioned category of informal enterprise. It is therefore not strange to find watch repair shops in all Ugandan towns, while shops for repairing refrigerators and deep freezers are found in major towns. Frequent power surges assure a steady

supply of broken down refrigeration equipment that needs repairs. There is also a booming trade in used electronic goods. Items such as microwave stoves, for example, require frequent repairs that strengthen the trade of electronic technicians. Furthermore, in urban areas, especially, there is a rapid growth of class C video rooms meant for entertaining the very poor in slums of towns.

The trade of indigenous traditional healers, herbalists, astrologers and diviners never cease in African society. Superstition, real ailments and sheer ignorance make this category of trade lucrative. Practitioners of these trades are found in both rural and urban areas and the spread of the trade is forcing Government to recognize them. Traditional Birth Attendants are ubiquitous in villages with scarce medical facilities.

Economic hardship, influence from peers and social deviance plays a role in creating the problem of prostitution. Kampala City, in particular, has become a centre for this trade. It is an organized activity that is run by leaders in each area. Strangers (fellow women) are not entertained until registered and initiated into a company. Telephonic arrangements can be made. This trade carries with it as many dangers to it as is the behaviour of its participants. It is a trade of survival of the fittest.

Often unnoticed is the business of using official time to do unofficial work. Informal activities in offices include the use of office facilities such as computers and binders in doing work for private individuals. These are informal activities.

Various means of transport are now available. Instead of the traditional taxis and buses, much cheaper and more convenient bicycle and motorcycle (*boda boda*) transportation has become very common. *Boda boda* transport began in the early 1970s as flexible transport for smugglers across the borders. It has now expanded to become a major and formal mode of transport. The informal aspect of this mode of transportation is that most of them operate without licenses. It is estimated that they number 80,000 in operation throughout the country.

In rural settings, the making of pots as well as the manufacturing of implements and equipment for hunting, charcoal burning, grain milling, bicycle repair, black smiting, rope making, fishing and agricultural are major informal activities. Beer brewing and the distillation of "African gin" are extremely widespread activities. The sale of these intoxicants at stalls and in markets is very common. All the above examples have been noted as a result of observation.

2.6 Summary

Although the informal sector started as a cultural activity dating back to pre-historic times, it is now recognized as an economic sub-system in Uganda's economy. Failure of the national economy has largely been responsible for the development of the informal sector in Uganda. Although the sector is not accounted for in the national accounting matrix it is significant in generating self-employment for a majority of Ugandans. The Government of Uganda recognizes that the sector is capable of spurring economic growth and alleviating poverty. The major handicap the government and other stakeholders are facing is lack of reliable data to help them plan appropriate programs. Information, education, training, provision of credit, improving infrastructure are some of the crucial elements that could be considered to make the sector viable.

CHAPTER THREE

INFORMATION SOURCES, SYSTEMS AND SERVICES IN UGANDA

3.1 Introduction

This chapter aims at defining and mapping the information sector in Uganda with regard to general awareness and comparative studies. It is written from an inventory perspective and is based on a review of literature, a survey of advertisements, guidelines for mapping the information sector of other countries and on the authors' cumulative experience. Restrictions that hamper this sector's growth are outlined together with the government's plans for improvement.

3.2 Framework for describing Information Sources, Systems and Services

The starting point towards demarcating the Uganda information sector is the explanation, in general terms of the concepts; information sources, information systems, information services, and the information sector. Concept description leads to the discussion of the methods by which the sector can be mapped. Mapping techniques provide a framework for establishing at a later stage, any relation if any, between the country's information sector and the informal sector. In this way, the demarcation of the sector was achieved.

The term 'information systems and services' implies data and information sources in textual, factual, numerical and graphical forms, that are recorded in conventional or in non-conventional media and are handled in conventional ways or through the application of information technologies. It covers systems, services and information products or sources of libraries, documentation and information centers, databases and databanks, referral and information clearing centers, information analysis, consolidation and repackaging activities, decision support and management information programs as well as other specialized information facilities. These facilities include archives and records centers, publishing houses and bookshops, the mass media, insurance companies, postal and communication systems and sector information systems (MFPED, 1998:132). The term (information systems and services) is synonymous with what Machlup in the 1960s

termed the "Knowledge Industry" (Machlup 1962) or that Britz, Boon, & de Lange (1993:61-7) calls the information-based institutions.

Machlup, an economist, was the first person to define the information sector in 1962 and he called it the knowledge industry. In 1980, he broadened this definition. He described the information sector as a group of establishments, firms, institutions, organizations, and departments, or teams within them but also, in some instances, individuals and households that produce knowledge, information service or information goods either for their own use or for use of others (de Lange, 1993:1-10). The sector was organized in the form of occupations. Perhaps aware that it would be difficult to differentiate between information and non information occupations, he defined the information occupations as 'occupations that involve activities, gainful or costly, that are designed chiefly to aid in the generation, transmission, or reception of knowledge of any type, sort or quality, including giving directly or through instruments, visual, aural or otherwise sensible signals, and ranging from carrying messages to creating new knowledge. Machlup estimated the size of the information sector by calculating the costs involved in its components. His goal was to define the sector in general terms.

Machlup's pioneering study in determining the size of the information sector was followed by other studies within United States of America and abroad. For instance, Poirier (1990:245-285) states that although research on the information sector was for the most part limited to the USA, by the late 1970s and 1980s the same type of research was going on in industrialized countries in Europe. He adds that, since then, several studies have expanded to include Asia, the South Pacific as well as developing countries. In the USA, writers such as Porat (1977), Rubin and Sapp (1981), and Miles (1989) are noted. In South Africa studies by Burger (1981), Boon (1984), Viljoen (1987), Zaaiman (1985), Fouche in de Lange, Boon & Britz; Boon, Britz & de Lange (1993:109-123), and Britz, Boon & de Lange are equally recognized.

Following Machlup's definition, Porat in de Lange (1993) came up with a new description of the information sector by grouping information activities into primary and

secondary information sectors. According to him, the primary information sector includes: the knowledge production and inventive industries; information distribution and communication industries; risk management industries, including finance and insurance; search and coordination industries, including market information and advertising vendors; information processing and transmitting services, both electronic and non-electronic; information goods industries, including information machines; selected government activities, including postal services and education as well as support facilities (de Lange, 1993). The secondary information sector includes all information services produced for internal consumption by government and non-information firms. Porat developed a conceptual scheme for classifying information workers that includes markets for information, information in markets and information infrastructure. This approach was objected to, because the definition was too wide and unhelpful. Miles (1989:275-288) propagated a method of measuring the information sector simply based on an information technology approach. Rubin and Sapp (1981:195-213) were particularly interested in the international commerce of the information sector in the USA and concluded that the information sector does not do business on a large scale with the foreign sector. They measured the American information sector in terms of imports and exports. Like Machlup, Porat, Rubin and Sapp also failed to resolve the problem regarding the extent of specific boundaries for the information sector. Machlup used the cost method, while Porat, although following Machlup, used an in-depth analysis of the sector as his approach. Rubin and Sapp looked at it from a commercial point of view, implying that the information sector works in a closed economy. Miles, however, wanted the information sector to be measured from the information technology angle. From these authors' perspectives, it becomes clear that there is no uniform standard for measuring the information sector.

South African authors were mainly descriptive in their attempts to establish a definition for the information sector. Burger in de Lange (1993) views the information sector as the sector that is primarily concerned with the provision of information to all sectors of the economy. It is involved with the creation, collection, ordering, retrieval, processing and use of information. Considered from this perspective, the information sector is merely

described qualitatively as librarians would do. Boon (1984:86-92), in defining the information sector, which he called the information industry, describes it as that sector concerned with inventing, generating and collecting knowledge. It is furthermore concerned with the packaging, storage, organization, recall and duplication of information, but also with its dissemination, for example in the mass media, books, journals, libraries and information centers – but also by information brokers, information technology and by the information users or the information market place. Boon's method appears similar to Burger's. Viljoen in de Lange, Boon & Britz (1993) attempted to define the sector from an information specialist's angle, that is, listing information functions as a way of identifying people who belong to the information professions. Zaiman's exploratory study is based on the work of Bell and Porat's measurement of the American information sector. He uses population data and foreign trade statistics for measuring South Africa's information sector. de Lange criticizes Zaiman's (1985:129-138) work as lacking in detail. Fouche in de Lange, Boon & Britz (1993) attempts to estimate the size of the information activities in South Africa by taking into account four main occupational groups, namely professional, semi professional and technical occupations; management, executive and administrative occupations, clerical occupations and sales and related occupations. Fouche's attempt relates to Machlup's in considering the information sector from an occupational point of view. This has also been criticized on the grounds that it covers too large an area to provide an accurate picture.

From the foregoing critical review of core literature, certain conclusions may be drawn. First, there appears to be no disagreement that the information sector does, in fact, it exists. The pioneering work of Machlup remains an important point of departure in the study of information economics. Secondly, although research has been carried out in the information sector, different methods have been used and these methods have of necessity produced different results, which poses the question as to which one to use. The lack of uniformity in the approach to creating a framework creates grounds for more debates and opens the field to further exploration. Consensus on the scope of the information sector and its occupations is still needed despite the innovative proposal made by Britz, Boon & de Lange (1993) of using the Gross Domestic Product (GDP)

approach. Britz claims that this approach will bring together economic principles and information science.

3.3 The Uganda's Information Sector

Uganda suffers a dearth of literature about the nature, scope and size of its information sector. In spite of laws and policies intended to govern different aspects of information and knowledge management, there is no comprehensive, formal information policy. For example, the existing draft information and communication policy is overwhelmingly concerned with the press and pays too little attention to libraries. Even the present ICT policy is biased towards the business sector. Records and archives, resource centers and tele centers are not dealt with at all in the policies, while more than one policy is in place with regard to the telecommunications sector. No audit has ever been carried out in order to determine the scope of this sector and there is no evidence to suggest that Uganda has a standard for measuring the capacity of its information sector. The country's national accounting system, for example, would have been an ideal means of reflecting such information had the methodology been in place to do so. Information workers are seldom involved effectively in writing and publishing about aspects of their work. And when they do, the information is channeled to specific associations that are, in any case, ill equipped to mount major projects, such as a much-needed effort to demarcate the boundaries of functions within the information sector. This chapter is written from an exploratory perspective and aims at providing an inventory of the nature and scope of the information sector in Uganda. It is hoped that such an approach may provide useful insights and contribute to the development of this sector in Uganda.

After gaining independence in 1962, the national government of Uganda gave due recognition to the vital role that a well-organized information sector should play in national development. The need for developing an effective system for information transfer became even more essential in the light of the threefold symptoms of "backwardness" that had been noted among the population of the country, namely disease, ignorance and poverty.

As a result, a fairly sound infrastructure for library and information services was developed during the first decade. Highlights included the following events:

- 1) The establishment of a national public library system by the Public Libraries Board Act of 1964;
- 2) The retention of the Legal Depository Library as established by the Legal Deposits Act of 1958;
- 3) The enactment of the Copyright Act of 1964;
- 4) The Patents Act of 1964;
- 5) Enactment of the Trademarks Act of 1964;
- 6) The four national museums created by the imperial power were recognized and retained as vital institutions linking the past to the present;
- 7) Uganda Television became operational in 1964, although Radio Uganda had already begun broadcasting in 1954;
- 8) The East African School of Librarianship was established for capacity building in the information sector in 1963;
- 9) Libraries of varying sizes and services were established in the colleges, research centers and other institutions of higher learning as well as in government ministries and departments;
- 10) Bibliographic control of Ugandan publications began in 1958 with the publication of the *Uganda National Bibliography*. The Deposit Library and National Documentation Center for public records was created by the National Library and Deposit Act of 1969.

Interestingly, the political leaders who relied on the press to oppose the colonial power before independence, found it desirable to pass the Newspaper and Publications Act of 1964 as well as the Press Censorship and Correction Act of 1964 as a means of controlling categories of information intended for public consumption. Very little can be said about information development in Uganda from 1971 to 1985. Only one radio station, Radio Uganda, was operational during this period, while a single newspaper, *Voice of Uganda* (renamed *Uganda Times* in 1981), was being published. The publication

of books ground to a halt with foreign publishers relocating to other countries or closing down their establishments. This led to the closure of bookshops, while no new libraries or resource centers were established during this time. Most top information workers chose self-imposed exile after the arrest of a number of librarians. Journalists, likewise, fled the country. It may be stated categorically that the tyrannical regime of President Idi Amin during the seventies and the failure of subsequent regimes to bring peace and restore stability to the country seriously hampered the development of the information sector in Uganda. Hope was restored in 1986 with a change of government. The rebuilding process in Uganda, which included the information sector, began at this point in time.

During the last fifteen years, several information institutions have been developed or have been rehabilitated. These include the following: the National Agricultural Research Organization; National Environment Management Authority; Joint Clinical Research Center; Uganda AIDS Commission; Uganda Virus Research Institute; Population Secretariat; Malaria Control Unit; Carter Center for Guinea Worm; Uganda Investment Authority; River Blindness Control Unit at the Ministry of Health; Uganda Wildlife Authority; Desert Locust Control Organization; and the Uganda National Bureau of Standards. Since these institutions are already functioning as input centers for local, international and global information, databases can be accessed through them. Most of the institutions have information units or libraries that provide services such as the Current Awareness Service (CAS), Selective Dissemination of Information (SDI), as well as repackaging of information and referral services.

In the 21st century, the government of Uganda includes in its goals a vision and a strategy for providing an enabling environment to develop a national information and communication infrastructure and to ensure that all sectors benefit from it. The government has specifically articulated a vision of transforming Uganda into an information society – and in this it seems to have achieved certain successes. For instance, the growth of the communication industry in the country has risen from 4.6 % in 1988/89 to 23.3% in 1997/98. The country's strategy is to develop and effectively utilize information systems and services in the development of the country. Some of the

strategies intended to achieve the cherished vision include comprehensive and effective training programs for personnel involved in information systems and services. More specifically, the aim is to promote general statistical and computer literacy as well as to create a documentation and publishing culture among Ugandans while mobilizing sufficient funding to support the development of information systems. With the attainment of stability in government as well as effective policies, an enabling environment has been created to support those initiatives.

3.4 Methods for mapping Uganda's information sector

Compilation of information about the nature of the information sector in Uganda required the use of many different sources. The need for such an approach stems from what has already been stated in the introduction to this chapter, namely that, in Uganda, there are neither existing standards nor methodologies for measuring the sector. The approach adopted here is therefore based on criteria familiar to practitioners of library science, namely inventory taking among institutions that are involved in information-based activities of one kind or another. Such institutions would be occupied in activities including information production or processing (not the generation thereof), collection, organization, transmission, preservation, recall, and storage by means of different methods. The extent of this diversity of activities is reflected in the combination of methods used to write this chapter. These include:

- (a) Use of existing literature. Library, postal, and telephone directories as well as newsletters of organizations were examined to obtain names and addresses of information institutions. Secondly, a study of national census results (1991) was undertaken. This revealed the occupations of people, from which applicable information professions were identified. Thirdly, the International Standards Organization (ISO) classification of occupations was used to reinforce understanding of the existing national categorization. Finally, the literature of specific institutions was scanned and it was noted where key words such as 'information' and 'communication' featured prominently. This provided valuable insight, also into rather obscure types of information institutions.

- (b) A survey of newspaper advertisements seeking for qualified information workers, especially by non-book information institutions, helped to identify information systems that would not, otherwise, have been considered.
- (c) Operational guidelines used by South Africa in establishing the scope of its information sector within the information cycle was also adopted in this study. In South Africa, a qualitative approach is used to develop a framework for describing the information sector. To identify economically structured information activities, organizations and individuals who are concerned with the following activities in the information cycle were considered: collection, processing, organizing, storage, transmission, tracing and provision of information using both electronic and non electronic methods on behalf of another person or organization. The generation and usage part of information was excluded since these activities are part of all human activities and are therefore difficult to estimate. Organizations viewed as resorting under the information sector would be those functioning as separate systems with separate budgets within their organizations. Their systems would, primarily, be aimed at performing any or most of the activities mentioned in the information cycle and specific resources would be allocated to people responsible for performing such activities. This strategy increased understanding of the information institutions.
- (d) Recourse to personal knowledge as a career information worker improved substantially the existing knowledge about information institutions in the country. This knowledge was used to add to, or confirm, the nature of existent information institutions.

3.5 The Information Systems and Services

An analysis of Uganda's information sector produced three categories of information systems, namely the indigenous, exotic (or western models) and the hybrid system. Each of them is discussed briefly hereunder.

3.5.1 Indigenous Information System

Oral transmission of information and the cultural and social norms associated with it, is undoubtedly of major significance and will no doubt continue to be so for the foreseeable future (Sturges & Neill, 1993:11). The oral information system is the oldest and most

enduring of the indigenous information systems. This is due to several factors, including the fact that Uganda has a comparably larger population of non-literate people and a multiplicity of local languages. Furthermore, a large percentage of the population is not enthusiastic about reading and there is a general apathy towards (and lack of awareness of) the role of information in development and a poor information infrastructure.

Two types of oral systems exist, namely the general and the specialized. The general system has no bearing upon this thesis as it amounts to a daily exchange of information amongst people as a natural consequence of their social relationships. The second system, however, is of value to this thesis as it includes the passing on of knowledge for specific needs. Experts, role models, opinion making leaders, extension agents, herbalists, traditional birth attendants, and local council courts, are some of the pillars of this system. A substantial body of indigenous knowledge (IK) is transmitted and shared by means of this system (Flavier 1995) which includes unique, traditional and local knowledge existing within and developed around the specific conditions of men and women indigenous to a particular geographic area (Grenier, 1998). Such knowledge forms the information base of the society, which facilitates communication and decision-making. Because IK is biologically resident in human beings and socially binds them together, the indigenous information system is therefore dynamic and continually influenced by internal creativity and experimentation as well as by contact with external systems Flavier in Warren, Shikkerveer & Brokensha (1995). It is predominantly used in developing countries where western information systems have largely failed to address practical information transfer requirements of the majority of the population.

3.5.2 The Western Models

Included here are formal information systems that are working to provided information to specific clients in the country's information system.

3.5.2.1 Agricultural Information System

Being an agricultural country, with over 80% of its population directly involved in agriculture, explains why a great deal of emphasis is placed on agriculture. Some of the

agricultural institutions in the country include the Ministry of Agriculture, the National Agricultural Research Organization (NARO), the Faculty of Agriculture at Makerere University, the Agricultural Colleges, District Farm Institutes and the newly-created National Agricultural Advisory Services (NAADS). All these institutions, in one way or another, generate, process, store, disseminate and use information. NARO is the engine of applied agricultural research in the country. It's statutory mandate is to undertake, promote, and coordinate research in all aspects relating to crops, fisheries, forestry and livestock and to ensure the dissemination and application of such research results. Established in 1992, the organization's vision is to be a center of excellence spearheading the generation and transfer of improved and appropriate technologies leading to sustainable agricultural development. It inherited eight sectional research stations and transformed them into institutes. These are: Kawanda Agricultural Research Institute (KARI); Namulonge Agricultural and Animal Production Research Institute (NAARI); Serere Agricultural and Animal Health Research Institute (SAARI) in Soroti; Livestock Health Research Institute (LIRI) at Tororo; The Fisheries Research Institute (FIRI) at Jinja; The Forestry Research Institute (FORRI) at Nakawa; The Food Science and Technology Institute (FOSRI) at Nakawa; The Agricultural Engineering and the Appropriate Technology Research Institute (AEATRI) at Namalere. It also has a Coffee Research Center (COREC) (NARO, 2000:1).

In order to enhance its activities, NARO has established an Agricultural Research Information Service (ARIS). This system is charged with coordinating information and library activities within NARO and with the promotion of access to national and international agricultural research knowledge. It has built information resources from which it offers a range of services and products. Information products include CD ROM databases and Agricultural Information Services (AGRIS) Forestry; Animal Production and Dairy Technology Information (BEASTCD); Current Agricultural Research Information System (CARIS); Current Contents (Agriculture, Biology and Environmental Sciences); Development Activity Information (INDIX-DAI); International Information System for the Agricultural Sciences and Technology (AGRIS); Farm Animal Genetic Resources 1996; Food and Human Nutrition in AGRIS; Prospect: The

wood database; The Hutchinson Multimedia Encyclopedia; Veterinary Science and Animal Health Information (VETCD); Worldwide Forestry Information (TREECD); World Food Summit, Nov. 1996. In-house Databases include National Information Systems for the Agricultural Science and Technology (AGRIN); National Current Agricultural Research Information System (CARIN); and Information for Research Managers (INFORM). Regional Databases include African Highlands Initiative Database (AHI). In-house Publications include the *NARO Bulletin*; *Uganda Journal of Agricultural Sciences*; *FORI-News*; and *The African Journal of Tropical Hydrobiology and Fisheries*. National Documents such as reports, the *Uganda Gazette*, workshop proceedings, theses and dissertations, maps, newspapers, a special collection of microfiche from the Food Agricultural Organization (FAO) with information in Uganda for the period ranging from 1945 to 1988 are preserved. NARO utilizes government funds and sources in other international organizations for its purchases and/or subscriptions with regard to information resources. It has an Electronic Communication system (Internet) which, in addition to the usual services, subscribes to Networks/Listserver. NARO has also acquired The Essential Electronic Agricultural Library (TEEAL) on CD-ROM that comprises over one hundred major agricultural journals and FAO monograph series. Other Information Services include Literature Search Service; Current Awareness Service: Pages of Contents; Accessions List; Referral Service; Document Delivery; Loan Service (NARO staff only) Newspapers Cuttings: Agriculture in the News; Photocopying, SDI reprographics. It prepares state of the art reports, and does repackaging of information on a regular basis to meet the varied interests and demands of the clientele and publishes a directory of the on-going projects (NARO, 1998:1-3). NARO furthermore publishes the *National Agricultural Research Bibliography*. All agriculture-related institutions form an agricultural information system for Uganda.

3.5.2.2 Business and Financial Information System

Businesses are dependent on fast information and for this reason a business and financial information system has been established – also to promote business and commerce and thereby directly contributing to Uganda's economy. Information about trading companies, their addresses, products and trade names are included.

Other information that can be obtained from the system includes economic data with regard to Uganda's commercial and foreign policy, investment opportunities, exports and imports, production and markets. Vital statistics on Uganda's Gross Domestic Product (GDP), Gross National Product (GNP), interest rates, exchange rates and any other statistical figures of interest relating to finance and business are also available.

Institutions central to the Business and Financial Information System are the Banks, especially the Bank of Uganda; Registrar of Companies; Uganda Travel Bureau; Uganda Export Promotion Board; Uganda Investment Authority; Uganda National Chamber of Commerce and Industry; Micro Finance Institutions; Uganda Capital Markets Authority; Uganda Revenue Authority; Privatization Secretariat; and the Uganda Wildlife Authority. Others include: the Coffee Development Authority; Cotton Development Organization; British American Tobacco; Uganda Tea Authority; Management Training and Advisory Centre; Government Ministries of Finance, Planning and Economic Development; Tourism, Trade and Industry; and The Uganda National Bureau of Standards.

As the insurance industry in Uganda is growing rapidly, the government has amended and consolidated law relating to insurance. The new law has established the Uganda Insurance Commission whose objective is to ensure effective administration, supervision, regulation and control of the insurance industry in Uganda. Although information activities and services are not explicitly mentioned, the Commission, insurance companies and the Uganda Insurance Association are the principal conduits for information sharing and networking. The Association aims at promoting the development and expansion of insurance services in the country. Basically, advisory information services are rendered.

3.5.2.3 Library and Information Centers systems and services

As historic paradigms of information storage and retrieval libraries form the biggest part of the documentary information system. Others are resources centers, bibliographic centers, information analysis centers and documentation centers. Like in several other

countries, libraries have also been established in Uganda as independent units. They may be categorized by type, by services rendered or by clients catered for, or by function (i.e. based on the collection and the nature of use: community; territorial distribution; ownership; location; administrative convenience and the position in the social system) (Ocholla, 1993:22-30). This typology brings together national libraries; libraries of institutions of higher education; other major non-specialized libraries; school libraries; special libraries open to the public; special libraries reserved for primary users, and public libraries. The summary given below provides a fair picture of the library institutions in the country.

There are only two national libraries in Uganda that serve as deposit libraries, namely the Makerere University Legal Deposit Library and the Deposit Library and Documentation Center at the Uganda Management Institute, Kampala. The Makerere University Deposit Library was established in 1956 as the official depository for national imprints, and for the United Nations and its specialized agencies. This section contains materials from as far back as 1900. Private archives are also kept in this library which is a source of information for agencies which deposit their publications in it. Services offered include reference and referral material, photocopy and microfilming services, Internet, E-mail services, binding, lending, compilation of bibliographies, abstracting and indexing of services.

The Deposit Library and Documentation Center was established in 1969 as a solution to the problem of poorly organized national literature. The Act changed the name and function of the, then, Institute of Public Administration (now Uganda Management Institute) to the National Library and Documentation Center, which is discussed in more detail at a later stage. The Act established the library component as the depository for published national imprints, as is the case with Makerere University. This library is a source of information with a national character. Its services are the same as those rendered by the Makerere Legal Deposit Library.

Libraries of institutions of education include university, college and school libraries, which are aimed at supporting teaching, research and the dissemination of information.

There are 11 universities in Uganda, all with libraries of different sizes and scopes. College libraries include 10 for Grade 5 teacher education, 71 for Grade 3 teacher education, 3 for agriculture, 1 for cooperatives and business education, 4 for health, 1 for tourism, 1 for forestry, 3 for technical services, 1 for surveying services and 5 for commerce. There are over 1000 secondary schools in Uganda and over 12 000 primary schools. Unfortunately libraries for schools are least developed, or do not exist at all. It is estimated that there are just about 450 secondary school libraries, while only about 1 percent of the primary schools has rudimentary facilities that could hardly be called libraries.

Library services include facilities for referencing, lending, readers' guidance services, information searching, photocopying, binding, Current Awareness Service (CAS), Selective Dissemination of Information (SDI), abstracting and indexing services, inter-library loan services, Internet and E-mail services.

The public library system in Uganda comprises a network of 21 branches countrywide. There are eighteen static libraries and book box facilities. The Public Libraries Board, the body managing public libraries, was established by the Public Libraries Act of 1964 with the mandate "... to establish, equip, manage and maintain public libraries in Uganda..." With the enactment of the Local Government's Act of 1997, public libraries have been decentralized to local council level. The Public Libraries Headquarters continues to offer technical advice, support, inspection, supervision and training for the decentralized libraries (MFPED, 1998:137). It manages a tele centre in Nakaseke Sub-county in the Luwero District. Reference and lending services are provided.

National Non-Governmental Organisation (NGO) libraries fall outside the government structure and are known by various names – the most common being resources centers. These centers are appropriate conduits for disseminating information of NGO activities. Some of the organizations with information-related departments include: Africa 2000 Network; United Nations Development Programs (UNDP); The Aids Support Organization (TASO); Development Network of Indigenous Voluntary Associations (DENIVA); Family

Planning Association of Uganda; Safe Motherhood; Young Women's Christian Association (YWCA); Uganda Women Finance Trust Documentation Center; Uganda Spastics Society; the AIDS Information Center; and the Uganda Association for the Mentally Handicapped. Services provided include interactive search, photocopying, Internet surfing, publication of newsletters and brochure, and E-mail services.

The following international organizations are active in information provision as a secondary part of their activities: the World Bank; United Nations Development Program (UNDP); African Medical Research Foundation (AMREF); Oxfam; World Health Organization (WHO); World Food Program (WFP); United Nations Children's Fund (UNICEF); ACCORD (Euro-Action); The International Council for the Red Cross; the Mennonite Central Committee; Private Enterprise Support, Training and Organizational Development, (PRESTO) of the United States Agency for International Development (USAID); and ISIS WICCE (name of Egyptian Goddess) Women's International Cross Cultural Exchange. ISIS WICCE has information unit. Sources of information found in these organisations relate to their work and services provided basically include CAS, photocopying and information services.

Foreign Mission libraries for public use are found in a few embassies and high commissions. Notable among them are the British Council Library, French Embassy Library (*Alliance Francaise-Bibliotheque*), German Cultural Center Library, Korean Cultural Center, Indian High Commission Library, and the United States Information Service. Foreign mission libraries promote information about different aspects of developments and opportunities in their countries. They serve as excellent public relations units for their countries. Some of the services offered by such libraries include reading services, limited lending, information exhibitions and film shows.

Furthermore, there are special libraries reserved for primary users. These are found in banks, and the Institute of Bankers Library is of special interest in this regard. These libraries (13 in number) are specialized and cater for specific clients. Although banking services are increasing, certain banks do not provide public information services. Bank libraries serve as

sources of information on banking activities, monetary and fiscal policies, and trade and commercial laws. They provide reading facilities, reference services, limited lending services, photocopying, CAS and SDI.

3.5.2.4 Hybrid information system

Among the hybrid information providers are the tele centers and the resource centers. These centers offer a mix of indigenous and exotic or modern information systems. A tele center is an information system that combines a community library and a telecommunication center on one site. The overall objective of Tele centers is to show how a public library, or appropriate organizations and telecommunication agencies (using appropriate technologies) could work together and provide multiple development-oriented information services to rural communities. They are rallying points for information on rural development. International powers have combined in an effort to empower sub-Saharan African communities with the ability to apply information and communication technologies (ICTs) to their own social and economic development programs (IDRC, 1997:1). Uganda has four tele centers, all of which are located in rural areas. These include the Nakaseke Multipurpose Community Tele center and Library in the Luwero District; the Hoima Catholic Church Tele center in the Hoima District; the Nabweru Tele-center and the Buwama Multipurpose Tele center, which are located in the Mpigi District. Services provided include telephone, fax, Internet access, library, e-mail, newspaper services, library and book services, commercial telephone services, as well as tele medicine, and information services. Other services include photocopying, computer training, and information on markets, crops, and the cottage industry. Information on weather conditions and indigenous information is generated and recorded by the people themselves.

The major documentation center in Uganda is the National Deposit Library and Documentation Center established in 1969 by an Act of Parliament. It was created to make provision for the deposit and preservation of copies of books written or printed and published in Uganda. The Act requires authors and publishers to deposit at least one copy of their publications (MFPED, 1998:136) at this Center and another at the Makerere University Legal Depository. The Center publishes a quarterly *Accession Bulletin* and

offers reference and photocopy services. Other institutions, especially NGOs and research centers, have established documentation centers as resource banks for their publications. Holdings differ from one to another, depending upon the intensity of research activity in question.

There are two official bibliographic centers in Uganda, i.e. the National Deposit Library and Documentation Center at the Uganda Management Institute in Kampala, and the Legal Deposit Library at Makerere University. Both institutions collect and organize information materials and disseminate bibliographic products. The National Deposit Library and Documentation Center publishes a regular *Accessions Bulletin* and a bibliography of its holdings. The Legal Deposit Library publishes, albeit irregularly, the *Uganda National Bibliography*. The Legal Deposit Library serves as a national library of Uganda. The Library and Documentation Center for Basic Research is a local initiative by an NGO that specializes in social sector research. Services provided include referencing, photocopying, E-mail, Internet, and subject bibliographies.

Two types of Information Analysis Centers (IACs) can be distinguished, namely those dealing with confidential information and those that deal with public information. Their activities include data gathering, scrutiny, analysis, synthesis and application. Information from confidential IACs is collected covertly and this information remains confidential. Most of the information generated covertly remains classified. The Office of the President and the Security Services are outstanding examples. Due to the fact that the method of dealing with information is confidential, it is difficult to get to know these institutions as sources of information as such. It would therefore be sufficient to assume that they could be dealing with intelligence reports and the updating of information. Under normal circumstances, public documents would be preserved in the National Archives and conditions for accessibility by the public clearly stipulated by the respective legislation.

Public information analysis centers can be classified as those that make available state-of-the-art reports, and those that compile indexes and abstracts, prepare conferences and maintain field registers. They furthermore carry out information consultancy services,

referral services, undertake surveillance in the field, provide training and information dissemination. The Library of Congress field office for East Africa is a good example.

Resource Centers in Uganda are about ten years old. A few of these still exist and are subject-based resource centers. Some of them are: the Human Rights Resource Center (HURIPEC); the Gender Resource Center at the Ministry of Gender; the Uganda Women Tree Planting Movement Resource Center; the Teachers' Resource Center at the Ministry of Education Headquarters and in the districts; the Uganda Joint Action for Adult Education (UJAFAE) Resource Center; ISIS-WICCE Women's International Cross Cultural Exchange Resource Center; Refugees' Resource Center at Makerere University, and others. Various NGOs have established resource centers as part of their activity in serving the civil society. Examples include DENIVA; Action for Development (ACFODE); Safe Motherhood; Legal Aid Clinic; and Foundation for Human Rights Initiative (FHRI). Services offered include newsletter publication, seminars, discussion forums, and *information repackaging*, photocopying and referral information services.

In Uganda, the publication and manufacture of books, newspapers, journals, magazines and CD-ROMs still lag behind. Most of the books in the country are imported and publishing houses are few. Private sector publishing is a growing activity, while public sector publishing is diminishing. Government rightly believes that it is not a good business manager, and that the private sector has trained people to do the job. Besides, it receives revenue from the private sector without much expenditure. Foreign publishers have a strong presence in Uganda and textbooks are estimated to account for 60 – 75% of the total publishing output. The Public and Private sectors are both engaged in publishing. In the public sector, Government is the major publisher and makes use of the Uganda Printing and Publishing Corporation, the National Curriculum Development Center, the *New Vision* (Newspapers), the Law Development Center and the Ministries. Fountain Publishers, Rorash Educational Publishers, Kamalu, T&E, and The Monitor (newspaper) are some examples of indigenous publishing houses. Such publishing houses concentrate on the primary school market, while foreign publishers such as Cambridge University Press, Oxford University Press, Longman, and Macmillan are examples of

those that are active in the textbook market.

Due to the problem of funding, not many journals are published and those that are, are mostly published by Societies and Universities. For example, the Uganda Society publishes the *Uganda Journal* 1923-, while Makerere University faculties published the *Makerere Medical Journal* 1993- as well as *Dialogue* 1994-, *Journal of African Religion and Philosophy* 1989-9, *Education Journal* 1998, *Uganda Environmental and Network Research Management Policy and Law* 1992. Most of these journals are published irregularly. Although magazines in English and local languages attract a diverse readership, not many are published – and it is not uncommon for magazines to go out of print.

In general, bookshops are showing signs of revival in all Ugandan towns, while the established ones are to be found in Kampala. They mainly sell textbooks along with stationery. Examples are Mukono Bookshop, Family Book Center, St. Paul Book Center, The Makerere University Bookshop, and Aristoc Bookshop.

Mass media, in a broad sense, refers to the press, broadcasting, films and books. McQuail in Ocholla (1993:6) in his *Sociology of Mass Communication* enumerates seven important features of mass communication. These are: complexity, large audiences, public, heterogeneous audiences, simultaneous contact with a large number of people widely separated from each other by distance, limited relationships between communicator and the audience collectively unique to modern society. In addition, mass media centers offer amusement, music, drama, advertisements, silly games, sports, comics, and detective novels that keep people informed and relaxed (Ocholla, 1993:6). The mass media plays a critical role in spreading awareness and provides broadcasting channels of communication to the poor and to remote areas. They include radio and television, newspapers, magazines, theater, cinema, cyber cafés, amusement or entertainment parks, and casinos.

Radio was first introduced in Uganda in 1953 as a Government department but became

operational in 1954 (Mbabazi, 1998:4). As a result of liberalization of the Ugandan economy, investment in private radio stations has increased information delivery to the masses. Presently there are 100 licensed private radio stations with 52 already operating in the country, including government owned 'Radio Uganda'. Nearly all are FM stations.

Television was first introduced in Uganda in 1963 but started transmitting as a department of the Ministry of Information and Broadcasting in 1964 (Ministry of Information & Broadcasting, 1984:3). With the liberalization of the communication sector, Uganda Television Network has expanded. In addition to Uganda Television (UTV), there are about seven private television stations, including Africa (Sanyu) Television, Channel Television, Lighthouse Television, M-Net, Wavamuno Broadcasting Service (WBS) and Movie Magic. Their services include CAS, information services and entertainment.

Publication of newspapers in Uganda began in 1903, but over the years the country has witnessed the launching, but also the demise of a myriad of newspapers. At present, about twenty newspapers are being published. Major papers, which are both dailies, are *New Vision* and *The Monitor*. Publishing is done in the five local languages, namely Ateso, Luo, Luganda, and Lunyankole/Ruchiga. While *The East African* is a weekly publication, there are also daily, biweekly and weekly newspapers. Newspapers are a good source of information on a wide range of topics. They offer CAS, advertising, entertainment and announcement services.

Prior to the building of modern theaters in Uganda, open-air shows featured prominently in village life. Such shows were performed as part of different ceremonies, such as births, marriages and deaths, rituals, initiation ceremonies and celebrations. Modern theater began in 1959. However, during the 1990s onwards, theater has expanded because of increasing investment by individuals and private companies that view it as a growing domain of urban entertainment. Drama and stage shows (Community Theater) are still performed in rural areas in the open air and are free. Theater is used for entertainment and in the dissemination of information on topics like AIDS, child abuse, domestic

violence, and corruption and development activities in various areas.

Art Galleries are insignificant in Uganda and the habit of visiting them is not well established. Productive artists seem to be concentrated in the capital city where most tourists, who include art appreciation as part of their visit, are centered. Uganda does not yet cater sufficiently for art lovers, mainly because its hospitality facilities are not yet adequately developed in the countryside. A well-known Art Gallery is the Uganda National Cultural Center, also called the Nommo Gallery. Others are: Okapi, Tulifanya and African Mini Gallery.

Cinema is one of the most popular forms of art and entertainment in Uganda. In addition to its artistic and entertainment value, cinema is important in education, especially as a teaching aid. Cinema was established a long time ago and every town has at least one cinema hall. The biggest concentration can, of course, be found in Kampala, the capital city. With the liberalization of the economy, many people are investing in the cinema.

Uganda has an established network of post offices and telecommunications throughout the country. Posts and Telecommunications are limited to the urban areas and the percentage of its users is extremely low. It is estimated that only about 2 percent of the population make use of these facilities. Whether poverty, illiteracy in the print media and use of other media such as messengers has anything to do with this low exploitation of the service is debatable. With the liberalization of the communication sector, as provided for in the Uganda Communications Act No.8 of 1997, competition has been injected into the communication industry. The Uganda Communication Commission has been created to promote, develop and protect the communication industry. Through the Act, Uganda Posts and Telecommunication Ltd. have been separated and are now known as Uganda Postal Limited (UPL), Uganda Telecommunication Limited (UTL) and the Post Bank Uganda Limited (PBU) respectively.

During the past decade other courier companies have opened up their offices, including TNT, DHL, Yellow Pages, Expedited Mail Service (EMS), Skynet Uganda Limited,

TransAfrica Express Courier, DAKS Courier/United Parcel Service (UPS), Elma Express Delivery limited, East African Courier Limited (FEDEX), Federal Express (FedEx), and Uganda Post Limited. The Association of Courier Companies in Uganda (ACCU) was formed to protect their interests and integrity.

3.5.2.5 Disaster Management Information System

Earthquakes, drought, AIDS, flood, fires, and wars are some of the major disasters that have often caused havoc in Uganda. It is the responsibility of Government to be prepared for such unfortunate events and plan necessary prevention, preparation, reaction and recovery arrangements. Because they occur frequently, disaster management is on the priority list of Government programs and for this purpose, management of disasters in Uganda is the responsibility of the Prime Minister's Office. Within this Office, there is the Ministry for Disaster Preparedness and Refugees, whose responsibility is to implement the national disaster policy. The Ministry works in close collaboration with the Uganda Red Cross Society, the Health Ministry, UNICEF, World Bank and the United Nations Fund for Population Activities (UNFPA). A Bill on disaster preparedness and management has been presented to parliament. Although this is not yet law, information about disasters and related activities can be accessed at those institutions. In addition, the Ministry of Energy and Mineral Development is responsible for the Nuclear Information Node and Seismological Network in the country.

3.5.2.6 Environment Management and Geographical Information System

The Ministry of Lands, Water and Environment is responsible for all environmental issues in the country. Within the environment sector, there are public organizations that are responsible for specific environmental activities including the Uganda Land Commission, Survey and Mapping, the National Meteorological Center, and the National Environment Management Authority (NEMA). Apart from the library to be found in the Environment Department, NEMA and the National Water & Sewerage Corporation (NW&SC) also have libraries from which information on topics related to environment and water management can be accessed. The NEMA library's function is to develop and maintain a collection of scientific and technical information on the environment both at

national and international levels. The main subject areas include climate, terrestrial ecosystems, forestry, bio-diversity, water environment, energy, pollution and waste, geographical information systems, its own publications, industry, and all aspects of the environment. Databases maintained include library catalogue, environment impact assessments carried out and approved, Uganda dataset and environment information network (i.e. metadata of information holdings of partners), the Infoterra database and environment audit and inspections. The Directorate of Water Development is mandated to manage, use and develop the water resources of Uganda in an integrated and sustainable manner in order to secure and provide water of adequate quantity and quality for all social and economic needs for present and future generations. The dissemination of information is an important part of the department's activities. Sources of information include legal information pertaining to the environment, reports, newsletters, and newspapers. Information services provided include reference services, SDI, CAS, photocopying, e-mail, etc.

Uganda finds itself in a unique position because of its varied landscape, climate and development activities, which generate the need for large-scale and varied information services. A crucial area in this regard is the Geographic Information System (GIS) which is charged with the provision of information on climate, geology, soil, rainfall patterns, weather, landscape, rock structure and other areas pertaining to geography. Such information supports other sectors, especially the agricultural and mining sector while contributing to archaeological work and paleontology. NEMA, as well as the Departments of Geography and Geology at Makerere University are the major nodes in the Geographic Information System in Uganda. Areas, in which information is collected, include remote sensing, aeronautical services, agro-ecological characterization, land use mapping, satellite image processing, early warning systems information, GRID information series, and intelligent geographical information. Also of importance with regard to climate information, is the National Meteorological Center in Entebbe.

3.5.2.7 Health Information System

The Health Information System (HIS) provides information on medical breakthroughs,

epidemics, medical facilities and services, both technical and non-technical, to medical personnel, researchers, and the general public. Such information may be required by different people to address different medical or health issues. Institutions which are important in this regard in Uganda are the Ministry of Health, specifically the Unit for Information, Education and Communication (IEC), the Mulago referral Hospital, the faculties of medicine at Makerere University and Mbarara University of Science and Technology, the Uganda Virus Research Institute (UVRI) and the Joint Clinical Research Center. Also important are the numerous hospitals, dispensaries and sub-dispensaries, public and private, whose medical staff provides oral information. The universities in Uganda have good libraries and among these the best is the medical Albert Cook Library at Makerere University. Information sources include books (medical mostly), periodicals, pamphlets, government reports, but also of Health organizations and International bodies such as the WHO. The Library keeps medical archives that include Dr. Albert Cook's manuscripts, correspondences, hospital registers, prescriptions and diagnoses. Medical CD-ROMs include titles such as Medline for health topics; Health Source Plus; AIDSLINE for HIV/AIDS information and related topics; POPLINE for population-related topics; Tropical medicine Plus (for tropical diseases including schistosomiasis, sickle cell disorders, Sexually Transmitted Diseases (STDs), and Malaria) as well as the Cochrane Library CD-ROM (for evidenced medicine). *African Index Medicus* (AIM) is the local database in which health publications and researches in Uganda are abstracted and entered. Information services offered include the inexpensive "off-line" Internet access to information services and communication via e-mail. Library reference and information services include CAS, SDI, and information searches, photocopying and user guidance.

3.5.2.8 Historical and Cultural Information Systems

Museums and Antiquities, as well as Archives and Records constitute the historical information system. Museums preserve artifacts for the future and make them available for use today (Wills, 1994:32). They conserve objects of artistic, cultural, historical and scientific significance, and act as information centers for research, especially in

ethnography, conservation, education and culture.

Uganda does not have a proud history of museums. Only four exist, namely the Uganda National Museum in Kampala, Teso Museum in the Soroti District, the Game and Fisheries Museum, Zoo, Aquarium and Library, and the Geological Survey Museum and Library. The latter two are located in Entebbe Town. The National Museum was established in 1908 while Teso Museum was started in 1957.

The National Museum is rich in prehistoric artifacts and the history of Uganda's Stone Age can be followed in this museum. Among the items of cultural significance kept in the museum are musical instruments, royal regalia, weaponry, fishing and hunting tools, but also utensils and clothing, among others, are well conserved. The scientific section of the museum displays a variety of items ranging from food types to reptiles and rocks that have been documented in early editions of the *Uganda Journal*. The engineering section displays relics of imperial occupation, including items such as the first cars imported into Uganda, which worked with a strange type of combustion engine, the first printing press and other interesting devices. It also has a library with rare books and other information materials. The museum is popular with tourists.

The Teso Museum occupies a small room in the District Administration building. Its contents include animal trophies and skeletons that depict the most common animals of the area, but also art of early Iteso cultures, weapons of the early times, musical instruments, and fishing items of different types made from local materials and iron.

Related to museums are the antiquities. "Antiquity" refers to the distant past, extending to prehistoric times (Cambridge Dictionary, 1997:51). The Department of Antiquities in Uganda was established in 1908 along with the National Museum. The Department is now part of the National Museum. It keeps items of historical and archeological value such as regalia, Ugandan stamps, coins, and currency of colonial times. Other cultural sites include the Kasubi Tombs, major churches built in the Victorian architectural style, as well as the Uganda Martyrs Shrine at Namugongo.

“Records” refer to books (published or unpublished), papers, manuscripts, maps, files, photographs or any other documentary materials, regardless of physical characteristics, made or received by the public in the day-to-day transactions of public affairs or business, formulation of policies and in decision-making operations, procedures and rules of any public or private body (MFPED, 1998:138). Due to neglect and mismanagement of public records common in Uganda in the 1970s and the 1980s, Uganda irretrievably lost a great deal of historically and professionally useful data and information in various sectors, especially in the economic, political and socio-cultural areas. In 1998, Government supported by the Overseas Development Administration (ODA) launched the Records and Management Program in the Ministry of Public Service. Every public office keeps its own records.

Uganda has a single national Archive, namely the Uganda National Archives that was established in 1892 and is located in the basement of the former Secretariat building at Entebbe, the former colonial headquarters for Uganda. District archives are decentralized while private and non-governmental institutions have their own private archives. Archive-creation is an on-going process. Until recent times, the National Archives was managed without a law governing its administration (MFPED, 1998:139). Since the absence of such a law meant that there were no regulations for obtaining important records from private firms, it has resulted in an unfortunate loss of vital information. However, the National Records and Archives Act 12 of 2001 has been passed by Parliament into a law. This Act promises to remedy this situation as it provides for the storage and sorting of government and public records, the disposal of ephemeral material and the preservation of records of historical value. The Act approves the establishment of a National Records Center (MFPED, 1998:139-140).

3.5.2.9 Industrial and Technical Information Systems and Services

After decades of turmoil, Uganda is on the threshold of reviving its industrial sector, with industrialization as a leading policy of Government. Although formal sector industries are few, an enabling political environment has been created to attract more foreign investors.

Local investors are also contributing to the best of their ability, mainly through small-scale industries and the informal sector. For this purpose, information about markets, developments, standards, etc. are of great importance. Industrial information is obtained from primary, secondary and auxiliary sources, including the so-called grey literature and information technology sources. Other sources include consultancy firms, trade fairs and exhibitions, reports, business delegations, trade and government missions (together with communication opportunities provided at luncheons and cocktail parties at these gatherings), training, field trips, business bulletins, directories, brochures and magazines. There is further exchange of information by means of facilities such as the telephone, fax machine, e-mail and Internet, but also one-on-one consultations and exchanges of views at public lectures. Results of research and development at testing laboratories and the input from expert personnel in government and other agencies provide grist for the mill of the industrial information system that has been created.

The Industrial Information System (IIS) supports the activities of industrialists and interfaces with other information systems, especially with the Business and Financial Information System. In Uganda most of the industrial information is channeled through the Ministry of Tourism, Trade and Industry. Several other information channels have been established and these include the Industrial & Technological Information Unit of Trade & Industry Ministry and the Uganda Manufacturers' Association (UMA) that forms the central body that brings together manufacturers/industrialists in Uganda. Small-scale industrialists come together under the Uganda Small Scale Industries Association. Other organizations include the Uganda Investment Authority, trade associations (such as the Uganda Chamber of Commerce and Industry), the National Council of Science and Technology, Uganda Industrial Research Institute, United Nations Industrial Development Organization (UNIDO), Private Sector Foundation (PSF), and the African Technology Network (ATN). Individual trades have many separate associations, while the Uganda National Bureau of Standards (UNBS) is responsible for quality assurance. Both associations provide their members with information on production, innovations, available opportunities, markets, and general information on the industrial sector in Uganda. UNBS, for example, collaborates with many institutions that are concerned with

standards in Africa and elsewhere. From such organizations it derives a great deal of information materials, including like standards directories, certification information, rules and procedures, metrology etc. UMA has an Industrial and Trade Information Reference Center, Technological Information Promotion System (TIPS), trade fairs and exhibitions, training centers, an economic desk TV program, publications and the UMA Consultancy & Information Service (UMACIS). Like the Industry and Technological Unit of the Ministry of Tourism, Trade and Industry, the UMA Information and Trade Services Center includes a well-stocked library covering a wide range of subjects. These include: how to start manufacturing industries, technological and investment perspectives, international trade statistics, world development reports, export directories for various industrialized countries, commodity yearbooks etc. The UMA Information Center has computer based information resources and maintains active links with external industrial and trade promotion organizations such as the International Trade Center, UNIDO and the Preferential Trade Area/Common Market for Eastern and Southern Africa (PTA/COMESA) Secretariat. It even has a show-ground for its activities. Available databases include the PTA TINET, World Bank Statistics, customs statistics, UNIDO International Development Association (IDA) abstracts, Trade Match, the Green Bus environmental database and databases on CD-ROM. TIPS National Bureau is the largest technological and trade information network in developing countries. It currently offers over 40 information services on technology production, services, finance, economy, technical regulations, quality environment protection and clean technology. TIPS information types include technology offers, financing requests, trade offers, research and development, services offers, bidding, financing offers, events, technology requests and publications. All TIPS information is accessed through printed bulletins distributed by the National Bureau via telemetric access to databases on an international level.

Technical information in Uganda is controlled by the public sector under the supervision of the Ministry of Lands, Water and Environment, which works closely with other ministries. However, there are also private sector surveyors who depend on the activities of the public sector and on the facilities available at the public institutions. These include the Geological Survey Department under the Ministry of Lands, Water and Environment

that is responsible for mineral surveys in Uganda. The activities of the major divisions within the Surveys Department culminate in survey information products prepared for dissemination. The major divisions responsible for preparing the information are the surveys processing and mapping division, the map printing depot and sales division, and the survey archives (MFPED, 1998:141). Included in this category is the Science and Technology Information System.

The Science and Technology Information System produces information for application of technology in areas such as medicine, communication, broadcasting, energy, food processing, mineral extraction, etc. Uganda recognizes that it is through aggressive adoption and application of science and technology in different sectors of the economy, that sustainable development can be achieved. The Uganda National Council for Science and Technology (UNCST) established in 1992 is the foremost body charged with coordination and dissemination of scientific and technology information and also with the creation of initial policy guidelines for the development of science and technology in Uganda. Emphasis is on the provision of information on appropriate technology, rather than the adaptation of technology from elsewhere that is not applicable locally. The UNCST coordinates all research activities in the country.

3.5.2.10 Legal Information System

The Judicial Service in Uganda comprises the Supreme Court, The High Court, The Magistrates Courts, The Resistance Courts, and the Traditional Courts. These institutions, including the Ministry of Justice, Courts of Appeal, Law Reform Commission, Human Rights Commission, Uganda Law Society, legal advice centers, such as the International Federation of Women Lawyers (FIDA), Makerere University Faculty of Law, and Law Development Center, make up the legal information system. Beneficiaries include the judiciary, administrative officers of the court, state attorneys, magistrates, the Directorate of Public Prosecution, advocates, law educators, law students, the police, legal information users in various government departments, public sector organizations, and the private sector. These institutions have libraries whose functions are acquiring, processing, storage, retrieval and dissemination of law information materials such as case

materials, new laws passed by parliament, legal precedents and document precedents, high court bulletins etc. Legal libraries offer various services including reference, lending, photocopying and Internet services. Referral services are carried out as deemed expedient. To ensure that proper administration of justice is carried out, the Uganda Constitution of 1995 provides that any court or other adjudicating authority prescribed by law to try criminal and civil suits in Uganda shall be independent and impartial. In the course of such work, information materials are generated. Law libraries or information system is mandated to collect such materials, process them and act as points of reference for that kind of information.

3.5.2.11 Public Sector Information System

Essentially, “public sector” refers to the traditional civil service and autonomous public organizations. Most of these have already been discussed in various sections of this chapter. It may be emphasized that every ministry and public sector organization collects processes and keeps its own data and information. Some of these are discussed under various sections of this chapter and it is only necessary to provide some examples here. The Ministry of Education deals with data on education; the Ministry of Health collects data on health; the Ministry of Agriculture, Animal Industry and Fisheries collects information on crops, livestock and fisheries; the Uganda Revenue Authority collects external trade data. Other Agencies include: the Uganda National Examination Board (UNEB), Treasury, Uganda Railways, Land Commission, Factories Inspectorate, National Drug Authority, Uganda Consumers’ Protection Association, Criminal Investigation Department (CID), Civil Aviation Authority, Urban Authorities, NGO Board, National Social Security Fund, National Housing & Construction Corporation, Immigration Department, local government, The Parliament and the Electoral Commission, among others (MFPED,1998:132). It may be added here that in Uganda, databases and data banks are regarded as electronic books, electronic publishing houses or electronic libraries (MFPED, 1998:141). Uganda’s information institutions have traditionally been paper-based and largely manual. Information flows have therefore been cumbersome, slow and costly. Modern information systems are characterized by use of advanced computer technology in the generation, processing, storage and distribution of information. Realizing this, through the country’s Vision 2025 program,

the Government of Uganda has expanded the traditional meaning of paper information sources to include information in electronic form. The aim is to broaden understanding of the transition in the scope and nature of information sources to include electronic books, publishing houses and libraries.

Statistics are extremely important for planning and it is for this reason that the Uganda Bureau of Statistics (UBOS) has been made responsible for statistical information at national level. This organization formerly resorted under the Statistics Department of the Ministry of Finance, Planning and Economic Development. It was established by an Act of Parliament in 1998 as a semi-autonomous body charged with providing for the development and maintenance of a national statistical system which ensures collection, analysis and dissemination of integrated, relevant, reliable and timely statistical information. The Bureau is responsible for coordinating, monitoring and supervising the compilation of official statistics. It produces official statistics using the “best practices” and encourages data users from the central government, local government, private sector, NGOs, researchers and academia, the press and the wider public to access and make the best use of the data.

3.5.2.12 Private Sector Information Systems

In developed countries, the private sector has assumed a vital role in establishing the information society. This is also becoming true in Uganda, where due to increasing liberalization and privatization of the economy, the private sector has contributed extensively in the creation of facilities for information dissemination. It is for this reason that there are private telephone companies, courier services, and private television and radio stations as well as information brokers. In addition, private individuals and organizations recognize the importance of keeping the public informed and therefore engage in product development, and in the sales of services and/or goods. As a result, they devise effective ways and means of reaching the target populations. All systems that fall under this category are regulated by the Uganda Communication Commission Act.

3.6 Use of Information Technology in Uganda

Computers were introduced in Uganda in 1967, in the form of Uganda Computer Services. This organization was set up to provide data processing services to the government and to the public sector organizations operating at that time. It is only within the last two decades that academics, students and other professionals have become interested in computer literacy (Niwe, 2000:1-98). The introduction of personal computers (PCs) brought with it a variety of new applications such as word processing, spreadsheets, desktop publishing and the use of Internet services.

The importance of Internet communications in enhancing relations among nations, transacting business and creating a better understanding cannot be overemphasized. This is clearly shown by the increasing number of local Internet providers and users. According to the Uganda Communication Commission (UCC), a statutory body created to exercise regulatory and control functions on communication providers, several companies have been licensed to exploit the growing telecommunication industry. This development follows the Telecommunications sector policy reform introduced by government in 1996. As a result of this reform, there has been a dramatic increase in telephone density from a mere 400 persons per line to the combined 220,000 telephones as at May 2001. Of these 60,000 are fixed telephone lines and 160,000 mobile telephone subscribers as against 5,000 users of mobile telephones by October 1998. This numbers have already been superceded in 2002. One hundred FM Radio stations have been licensed of which 52 are operating. Internet providers have risen from seven in 1998 to eleven as at May 2001. The liberalization and restructuring has brought about diversification. It has also led to the growth of various services including the Internet, e-mail, private data lines, private two-way radios, paging, private television and FM radio stations. Other benefits accruing from the reform include improved customer care by service providers, and extensive penetration of service across the country. Judging from the current statistics, Internet usage in Uganda is very low but is improving. This is through efforts such as the development of Information and Communication Technology (ICT) Policy, ongoing infrastructure network rollout by service providers, regulatory initiatives to reduce costs of access, and the establishment of an Internet Exchange Point (IXP) for Uganda. ICT

policy framework has been completed and submitted to Government for approval and adoption. In brief the framework provides for (a) application of ICT in all sectors of economic development (b) access for all (c) establishing of an ICT industry and, (d) a regulatory body for the implementation and monitoring of the Policy. Meanwhile, UCC has finalized preparation of a rural communications development policy, which includes strategies aimed at: supporting of introduction of Internet Points of Presence (PoP) in every district. It furthermore aims at the promotion of ICT capacity (training, management and maintenance), and of ICT awareness and content creation, as well as the establishment of a domestic IXP, reduction in congestion on the international routes, and optimal utilization of infrastructure.

Among the large spectrum of computer users to be found in Uganda nowadays are not only large organizations but also individuals. Internet service providers are Bushnet (U) Ltd., Wilken Afsat, Swiftnet Global Uganda Ltd., InfoCom, Sanyutel, Health Net and cyber cafés. Computer training schools have mushroomed in towns, while universities and some schools also have computer training elements in their curricula. Internet Service Providers (ISP) for rural areas include Africa On-line, and Uganda On-line. Uganda is also hooked into various international networks such as the African Virtual University – a system for teaching at a distance including school-net projects in various primary schools and the tele medicine pilot project at Mulago and Mengo hospitals.

Other IT equipment, such as telefax and PABX machines are also used in Uganda, although it is estimated that only 2% of Ugandans use cell phones. The Uganda Computer Society is a forum for professionals and practitioners that make use of computers and IT in the country. In a nutshell, the task is to transform Uganda into an information-based society through the benefits of faster communications. The government of Uganda intends to achieve this through promoting the industry by means of demonstrating support for Internet applications at the highest levels of government and through active public awareness campaigns. Other measures include the provision of adequate investment in Internet infrastructure, especially backbone and switching center networks, production of local content through the creation and enforcement of a legal framework to protect intellectual

property and copyright. The government also plans to increase training in technology and computer skills and to build an Internet culture by providing suitable technologies leading to affordable Internet access charges and special low-cost Internet accesses for schools, universities, libraries, multi purpose tele centers and public service institutions. More information about Internet-related issues can be accessed via the ministry's web site. UCC intends to set up model Tele-centers in every district and plans for every sub county to have a public telephone by the year 2005. There are eight hundred and thirty sub counties in Uganda. Furthermore, UCC is encouraging local content promotion on web sites for Uganda in order to encourage growth of business. There are also plans afoot for a policy regarding pricing of the Internet in order to make it affordable to most people. As long as there is economic and political stability in the country, there will be more growth in the telecommunications sector.

3.7 Summary

Nearly all sectors of the Ugandan economy deal with information of some kind. Oppenheim (1997:407-408), for example, recognizes that government is the largest information generator, processor and disseminator in a country. An analysis of Uganda's information systems and services reveals that although the country has the essential laws in place, institutions and policies for information and the system of data and information management are still haphazard, uncoordinated and largely ineffective. There is no evidence of pragmatic mapping and audit of the country's information sector for planning and effective development and utilization. However, dependence on government to map and audit a country's information sector has not always yielded rapid results. Debates on the demarcation of the information sector in a country, or even in some organizations, continue unabated. Interestingly, initiatives by individuals and some institutions have produced remarkable results.

Evidently, it is necessary for Uganda to develop a strategy for the establishment of information systems and services that could provide a suitable and efficient mechanism that, in turn, could yield proper and appropriate collected, collated, processed, stored and disseminated data/information in all areas of development. Such a system should be

capable of fast access to, and dissemination of, information to end-users within and outside the country. In order to achieve these goals, the country will have to pursue clearly defined policy objectives that include the establishment of a well-coordinated and coherent information management system that is able to promote a culture of sound record keeping which would also enhance the dissemination and use of information. This can be achieved by promoting, through education, a widespread awareness of the value and use of information as well as exploitation of information technology to enhance information functions and usage. Uganda's aims should be to encourage widespread information literacy and a value for information that, in turn, will drive information development and usage.

Undoubtedly there are problems to be overcome. Essentially, they include poor awareness of information systems exacerbated by poor infrastructure-related associations that, in turn, lead to the lack of will in developing structures for cooperation and coordination in resource building. Financial constraints, the virtual absence of communication linkages, the lack of dedicated and motivated staff and the lack of standards in methods and procedures, again, exacerbate this situation. Among the other problems that need to be addressed through a concerted effort are illiteracy and ignorance of a larger section of the population; low levels of sensitization; poor management of the existing information institutions; low levels of technology and high dependence on equipment and information resource donations. The willingness to address these issues seems to exist but, unfortunately, that alone cannot take the process far in a system dependent environment.

The next chapter, chapter four, describes the conceptual framework of the study. Essentially it defines the main concepts. These concepts are: information, information needs, information seeking behaviour, information use, informal sector, the informal sector entrepreneur, and Uganda. It provides a descriptive but an illustrated conceptual model detailing the process of identifying the information needs and uses of the sector.

CHAPTER FOUR

INFORMATION NEEDS, INFORMATION SEEKING AND INFORMATION USES: THE CONCEPTUAL FRAMEWORK

4.1 Introduction

The previous chapter reviewed the information sources, systems and services in Uganda. In this chapter the conceptual framework within which to study information needs and uses of the informal sector in Uganda is presented. Two aspects are covered. Terms are explained conceptually and the conceptual model is described and illustrated. The model examines the constituent elements that impact on the process of determining the information needs, seeking and use, and presents them as unified concepts within the conceptual framework.

4.2 The Conceptual analysis of terms

Underlying any organised body of knowledge is a structure of terms or concepts, which refer to the major phenomena, studied, and form the foundation of the conceptual framework of the subject investigated. The concepts being studied are information needs, information seeking and uses, which fall within the field of Information Science, a discipline that is renowned for the multiplicity of definitions of fundamental concepts (Smith, 1991:84). Other concepts are the informal sector, and its entrepreneurs.

Concepts are elements of scientific method. They are words or symbols in language that are used to represent mental images (Maxfield & Babbie, 1995:94). They are abstractions that represent certain aspects of reality. A concept is in reality a short definition of something. And defining something is only the beginning of explanation. Its value lies in introducing the perspective and making understandable the context to which meaning is attached to something (Ghuri & Kristianslud, 1995:17). In other words, concepts give operational meanings of texts of any coined words, phrases or expressions which cannot otherwise be understood because of their unconventional usage or unqualified usage (Nkpa, 1997:98). Concept clarification therefore was an important requirement of this study. The reason was that the meaning projected here could be

different from common language usage. Key elements underlying the study were singled out and appropriate definitions or explanations used. The concepts are: Information, Information need, Information-seeking, Information use, Informal Sector Entrepreneur, and Uganda.

4.2.1 Conceptions of Information

The importance of the concept information to information science is that information must be relevant; it must be related to knowledge, it is definable and operational, and offers a means for the prediction of effects on information (Ingwersen, 1992:26). Information influences understanding, and further understanding, developing and/or applying the various techniques of information needs assessment (Kaniki, 1999:91)

Whereas it is generally assumed that the concept of 'information' is familiar, a review of definitions, explanations and descriptions reveals that this is not such an obvious word. It remains a problematic concept in the vocabulary of communication science. It is for this reason that informationists have long argued over the nature of information, and ways of developing concepts of it for practical use. It is not even clear whether attempts to give meaning to it have a long history; that is, perhaps why the concept is a subject of continuous and important discussion (Buckland, 1991; Smith, 1991; Ingwersen, 1992). Cornelius (1996:11) reports of recent attempts in this direction saying that efforts have been made to develop hermeneutic approaches to the study of information. He refers readers to the works of Blair who wrote on *Language and representation in information retrieval*; Ingwersen whose work is *Information retrieval interaction*, and Qvortrup (1993) who dealt with *The controversy over the concept of information*. Their works were a reaction to a concern raised by Winograd and Flores (1986) in their work, *Understanding computers and cognition*. But briefly, the concept "information" remains one with multiple meanings Dick; Allen & Losee in Davis (2000:56); and (Zweizig & Powell, 1990:1). But simply stated, information is a product of processed data but not data itself. It is part of knowledge but not knowledge itself. Theoretically it is something between data and knowledge.

However, right from the 1970s when information science started to assert itself, the problem has been to state exactly what the word “information” means despite the fact that information has existed perhaps much longer than man (Stonier, 1991:258). If this is accepted it means information precedes human kind. Then the philosophical question comes with a position. As proof of his assertion he gives an example of information, which can be coded in DNA or RNA. His argument rests on the premise that information in the DNA has been around for at least a thousand million years. Unfortunately, there is little evidence to suggest that the definition of the concept was either important at that time, nor was there evidence of who baptised information as information and, more specifically, information as a concept of information science. However, the first to appear was an analysis of the understanding and use of the concept of *information* as seen from an information science point of view, by Belkin in (Ingwersen, 1992:9). Belkin formulated the problem to be that of facilitating the effective communication of *desired information*. This meant a purposeful wish for information. The emphasis was on the quality of the interaction between generators and users of recorded information. The statement implied the study of users’ reasons for acquiring information, recorded in systems of various kinds, the process of providing desired information to users qualitatively, and the process of use and further generation of information (Ingwersen, 1992:11). The same year, Belkin took another path suggesting and arguing about information as a concept in the context of a cognitive view of the situation with which information science is concerned (Ingwersen, 1992:29). Along this line of thinking, information was understood as a structure that is associated with a text in the generator’s modified conceptual structure, which underlies the surface structure (e.g. language) of the text (Smith, 1991:85; Ingwersen, 1992:21).

These scholars argue that information satisfies all prerequisites outlined above by linking it to the idea of structure within an analysis of the communication system that is of interest to information science. However, about two decades ago, Machlup (1983:657) had perceived information from a viewpoint of information exchanged during speech. He stressed that real information came only from an informant. Thus, information without informant – without a person who tells something – was information in only a metaphoric

sense. Taking this position a little further and considering it from the library situation, it would imply all books in libraries contain nothing but information in a metaphoric sense. This view was strengthened by Ingwersen's viewpoint that "...books are not made to be believed, but to be subjected to inquiry" (p. v). "When we consider a book, we must not ask ourselves what it says but what it means" (quoted from *Umberto Eco: The name of the Rose*). Machlup does not explain what information means, except to contribute that it is something people use to convey, or exchange meaningful messages. Both Belkin and Machlup recognize the state of uncertainty, which is identical to the notion of an anomalous state of knowledge. As a major concept of information science, uncertainty is detectable in ignorance, incompleteness, undecidability, complexity, randomness, vagueness and imprecision (Rijsbergen, 1996:1). In the context of information theory, analysis of various definitions of this period reveals that information had six different types of meanings (Werzig and Neveling, 1975:127-40). These are:

- the meaning approach in which the semantic contents of a message are accepted as information. This approach is concerned with the conveying of the desired meanings through the transmitted symbols;
- the effect approach, which says that information occurs only as a specific effect of a process;
- the structure approach, which views information as a construct of structures of the world or static relations between physical objects which may be perceived or not;
- the knowledge approach. This approach records knowledge that is built on the basis of perception of the structure of the world;
- the message approach, which is concerned with the transmission of symbols representing a message. Considered from the information theory aspect, this definition falls under Shannon and Weaver (1949) mathematical (data) theory of communication or information, which states that the amount of information in a message is related to the probability ratio of the message. The more it reduces probability, the more information it has. This theory views information from a technical angle, that is, a physical entity or simply a neutral phenomenon, and
- the process approach states that information occurs in the human mind when a problem and useful data are brought together. For example, Mizzaro (1996:238)

upholds Bateson's earlier (1972; 1979) definition that information is a difference that makes a difference, and also Brookes's earlier (1980) statement that information is small bits of knowledge.

Definitions and explanations framed afterwards have fallen into any of these approaches. But, within the context of user studies, the term "information" has been used to denote a *physical entity* or phenomenon, the *channel of communication* through which messages are transferred, or the *factual data* empirically determined and presented in a document or transmitted orally (Wilson, 1981:3). Rohde follows the same idea as Wilson stating that information is or denotes the factual data, advice, or opinion, a physical object such as a book or journal, or channel of communication through which a message is conveyed, for example oral or written communication (Rohde, 1986:50-51). Dervin & Nilan in Taylor (1991:221) in a paradigmatic shift in the study of information needs and uses provide an alternative paradigm that contrasts the traditional. It posits information as something constructed by human beings.

Taking another line, information may also be understood as a commodity, which can be traded, given away, sold, hoarded, or even analogous to some precious metals, debased through various kinds of distortions. Unlike many other commodities which, if possessed by one, information cannot simultaneously be held by another (Sligo & Jameson, 2000:860). This definition falls under the meaning approach. The value lies in its ability to describe reality, potentially completely, thereby reducing uncertainty and allowing people to function more effectively. In this regard information is *a thing* that can be transferred from one person to another like a brick (Dervin *et al*, 1982a: 805-830) and knowledge can be accumulated brick by brick. But unlike bricks, information is organically indivisible. It is given and the giver does not lose it at the same time.

Rohde (1986:51) attempted to collate earlier ideas by other people about the meaning of the concept of information. She covered some ground by citing a few authors, Ford, Krikelas, and Faibisoff and Elly. From these people, information meant the structure (or order) of any text that was capable of changing the image structure of a recipient, any

stimulus that reduced uncertainty and a symbol or set of symbols, which have the potential for meaning. Earlier in the 1980s Paisley had considered information as any stimulus that alters the cognitive structure of the receiver in the course on information task sequences that focus on learning, decision-making, problem solving, calculation, and verification. A synthesis of these definitions makes information fall under the effect approach.

From a process point of view, information originated from a new term *emorphosis* (etymologically meaning in-formation or inner forming). This in-formation would be realised as a process of change within the human mind (or image) caused by the receipt and integrated into the image, of a recorded or other structured message (Cilliérs, 1983:122). In this context, information is considered from the perception point of view. Other writers who have contributed lately to the process point of view are Dick (1991:114) who states that information is some active principle governing the human capacity to process fragments that are meaningless in isolation into a coherent and meaningful whole for the receiver. To him (Dick 1991:114) information extends to include all possible sources and the content of one's mind, cultural symbols and physical artefacts etc. which all are included in the meaning of information. Losee (1997:254) expresses an opinion that information may be defined as the characteristics of the output of a process, these being informative about the process and the input. Furthermore, information could be defined as the process in which an informant's cognitive structures are encoded and transmitted to an information seeker, who perceives the coded messages, interprets them, and learns from them (Allen, 1996:3). All these views indicate one common variable 'process'. It is this process in which the transfer of information takes place. The knowledge approach suggests that information be understood on this basis.

Considered from the viewpoint of information theory, these definitions indicate one thing, namely that information is something subsisting within the person. It is in the mind of a person and in an inert state. But should the need arise for its use, it is recalled from memory and put to use. This fits well into the *situation theory of information* that states that ...information is able to provide only an incomplete rather than complete description

of reality, and it is essentially internal, a part of an individual frame of reference, rather than an object that exists externally. This is what Dervin, stated two decades earlier. Basic to situational theory is the assumption that the factor common to all situations is that people move through time and space, making their own sense of the world in order to move through it (Rohde, 1986:62). Information is therefore that which informs. It is the supplement, which makes it possible for the actual mental state to cope with new situations, to transform into some slightly different configuration using language and other communicative means as key instruments in the process. It is the “glue” or cobweb binding people together, empowering them, and making them operate, effectively and efficiently, stimulating action, invention, and innovation. It expedites use in the individual. This type of information is one that can be gained by study, investigation, instruction, experience, experiment, observation, and practice. It should be packaged and communicated to its user in appropriate media. Information constructs knowledge and knowledge procreates information. Following the ideas of Mackay, information is defined as merely a sequence of bits, symbols, and signs (Campbell & Rijsbergen, 1996:252). It is unchanging and absolute. If a modification is made to it, it is a different piece of information.

Within the interactive feedback model, information is regarded from the cognitive viewpoint as a subjective construct Belkin and Ingwersen in Spink (1996:274). It modifies knowledge and at the highest level, and must enter the perceptual system (Cole, 1996:393). It is the individual who makes sense of the information, constructs reality, and decides the utility of the information in a given situation (Dervin, 1982a : 805-830; 419-444). In Dervin's *sense making theory*, a person becomes “informed” in a series of stages. First the person is confronted by a situation, but what is important is a specific aspect of the situation only, namely the individual's perspective on the situation or the gap-situation, which may be defined as an occurrence that raises questions. When this happens, the sense or meaning in the situation runs out or breaks down. The individual then attempts to reconstruct meaning or sense by defining the gap then bridging the gap. The individual then defines the gap and bridges the gap by seeking instructions from the environment. This results in the construction of new sense or meaning so that the

individual can move forward again (Cole, 1996:392). For example, it permits action and decisions Orminski in Mchombu (2000:45). All through the definitions and explanations given above, information is nothing but something that must be interpreted and understood. Failure to interpret means there will be no meaning. This brings this study to a new dimension related to the meanings of information stated above. That is, how information can be perceived from an interpretative viewpoint. It says that information is generated as meaning by the development of shared views and accounts of practices (Cornelius, 1996:11). The implications of this are that there can be no objective, meaning-independent information and that no one can anticipate what meaning it will have at any time in practice. It is through interpretation that meaning resorts.

Considered from the viewpoint of information resources management, information is a corporate resource, as important as other corporate resources; it has a life cycle that has to be managed; it has value and a cost, which should be defined and measured within the organisation (Bergeron, 1996:295).

Up to this point, the dimension of information as a concept remains a subject of continuous and important discussion. To summarise, it is generally agreed upon that information is transferred in the communication chain from its generator to its recipient, that it is a set of symbols brought together (e.g. letters, numbers, pictures, signs), and that it can be transferred in several forms (e.g. written, oral, gesturing). It is described as an abstract tool, which enables the task performance (Bystrom, 1996:328-29). Definitions of information are quite diverse.

Given these few indications of what information is the journey to the discovery of the exact definition of the concept of information looks unattainable to the present. It remains a grey area for further research. However, it may help to consolidate it at this stage from the perspective of dual requirements, i.e. information being the result of a transformation of a generator's knowledge structures on the one hand, and when perceived, affects and transforms the recipients state of knowledge, on the other.

From this explanation, it is observed that information has no intrinsic meaning, but can be said to have as many potential meanings as there are contexts in which it can be applied. It is perhaps this difficulty of defining precisely what the concept means that the famous British poet, T.S. Elliot, included two mocking lines to his play "The Rock: The Eagle soars in the summit of Heaven, 1934". The lines of the choruses read: *'where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information? And the question was added: where is the information we have lost in data?'* Hoel, in Cilliérs (1983:161). These two lines give an introduction to one of the first problems of information science, namely the difference between data, information and knowledge. Thus far, the concept information becomes one of the most loosely defined words in Information Science and other disciplines. As it may be noted, the interpretation and different uses of the concept (of information) is rather scattered, depending on the particular viewpoint and the research area in which the concept is applied.

Machlup & Mansfield had two decades ago (1983) come to the same conclusion when they pointed out that although information is defined differently among the disciplines, there was much overlap in research. Research in library and information science largely overlaps that of other disciplines such as cognitive psychology, computer science, linguistics, semantics, and philosophy (Hewins, 1990:160). The above expositions show that the term "information" is as elusive as time (Stonier, 1991:258). Time has that peculiarity of everyone knowing it very well but unable to define it. It is only measured. Perhaps 'time' as a concept of information science could be another grey area for further research. It is briefly concluded here that the concept information is one that has been understood and used by different authors from various perspectives without reaching an overall accepted definition (Fairer-Wessels, 1990:361). And with such richness, no single meaning can therefore be stipulated for general use since no universally accepted definition has been crystallised, and perhaps it will never be in the near future. It was this difficulty, which Goffman saw as long ago as in the 1970s and advised that a study of information should instead concentrate on the information-related phenomenon rather than information itself. Buckland (1991:351) supports this view arguing that any attempt to explore the meaning of that term would likely run into immediate difficulties. It is one

of those ironies of life that such a word or term such as information, like time, cannot be defined. This is one of the major weaknesses of the status of Information Science. Nevertheless, Buckland distinguishes three meanings of information as “information-as-process”, “information-as-knowledge”, information-as-thing”. This last one was objected to by Weiner, saying that information is information, not material like energy (Machlup, 1983:642). Information it seems, is according to W.Chalmers Smith’s 19th century hymn, for most part ‘immortal’, invincible’, and ‘in light inaccessible’, ‘hid from our eyes’ (Underwood, 1994:60). Therefore, faced with that difficulty, a pragmatic approach is to act as Goffman advised, that is, looking at information from its uses and value viewpoints. It appears therefore that this is where most contributors have started. And that being the take-off point, it becomes the individual person’s responsibility to clearly signal the intended meaning when using the term (Fairer-Wessels, 1990: 361).

In this study, the term “information” is recognised as an aspect or form of knowledge that is understood in the form of messages, ideas, facts, data of value, recorded or otherwise; a resource (Taylor and Farrell, 1994:88) to its recipient, pertinent to the real and perceived needs of the person, such as awareness, decision-making, problem-solving (Kaniki, 1999:191). It is factual knowledge, which is exclusively or mainly in the so-called rational dimension (Mersham & Skinner, 1999:44). And for that information to serve its purpose, it should be timely to its recipient, must be accurate, detailed enough, understandable (Taylor and Farrell, 1994:45) and should contain some element of newness, and should enable its user make confident and better decisions. It should be integrated with other information that already exist (Prasher, 1991:10) and within the preceptor’s system (Stonier, 1991:261). Integration of new knowledge into the existing knowledge can be said to increase the amount of information in a message. This is what the *Semantic Theory of Information* is all about. The concern of the theory is the conveyance of the desired meanings through the transmitted symbols.

4.2.2 Conceptions of Information Need

Following the conceptualisation of information as a multi dimensional entity, users’ needs for information are also likewise multidimensional. Like the concept of

information, *information need* has also been the subject of many studies for many years. It has been defined in a variety of ways by authors hardly ever reaching consensus (Fairer-Wessels, 1990:361). For example, Mackay (1960) whom it is believed to have raised the need for concept definition for the first time, described information need as incompleteness of the picture of the world, inadequacy in what we may call a person's state of readiness to interact purposely with the world around him in a particular area of interest. Later in the same decade, Taylor (1968) spoke of information need in a more detailed manner. This time he classified information need as visceral, conscious, formalised, and compromised, individuating four levels of question formation. During the same period as Taylor, another writer, O'Conner (1968), raised the issue of the ambiguous nature of the concept of information need. That was his contribution. Perhaps this was an early warning to future information scientists to be aware of the likelihood of the concept generating definition difficulties as well in (Mizzaro, 1996:240). As interest was rising, more studies were to follow. As evidence of this, since 1966 (from Menzel onwards) several chapters of the *Annual Review of Information Science and Technology* (ARIST) and papers have been devoted to reviews of literature on information need and use studies in an attempt to elucidate the concept. For example, Belkin, Oddy & Brooks (1982a, 1982b) spoke of it as the Anomalous State of Knowledge "ASK." They regarded information need not to be a need in itself, but viewed it to be a way of satisfying a more basic requirement such as the resolution of a problem, a situation in which the individual's internal sense has run out, he has encountered a situation wherein movement has stopped due to some kind of knowledge gap (Dervin and Nilan, 1986:3-33).

Mizzaro (1996:241) puts it simply that an information need obviously is a need for information, and information is the "difference" between two knowledge states. Kebede (2000:158) relates it both to content and non-content aspects of information. Content needs are users' needs for specific ideas, thoughts, claims, concepts or conceptual structure in order to resolve their knowledge gap or problem situations. On the other hand, he argues that non-content needs refer to aspects other than the content of information, the carrier. The non-content needs are also users' needs that have to be met, alongside the content needs, simply because ideas or thoughts that are needed depend on

the carrier, be it books, individuals, or computer systems. Therefore meeting information needs depends not only on the existence of potentially relevant information content but also on non-content factors. This point is particularly important to this study bearing in mind the nature of entrepreneurs of the informal sector. Packaging information in formats entrepreneurs are not accustomed to would create non-use.

In Belkin's theory of ASK, a person becomes 'informed' in a series of stages. First the person is confronted with a problematic situation, but it is only one aspect of the situation, the problematic aspect which is the recognition (awareness) of an insufficiency, gap or anomaly (abnormal breakdown) in one's own knowledge. This is associated with feelings of uncertainty. The gap or anomaly can be analysed by an outside observer, and the analysis enables the intermediary (librarian) to help the patron resolve the gap by suggesting appropriate information. The gap is "resolved" with the suggested information (Cole, 1996:392).

Information need could still be described according to the level of continuity of the need. Ingwersen (1986, 1992) coined Belkin's, Oddy and Brook's ASK-line using two acronyms ISK and USK meaning 'Incomplete State of Knowledge' and 'Uncertain State of Knowledge' respectively, and thereby unifying these three acronyms in a common concept. Frants and Brush (1988:86-91) distinguished between concrete and problem-solving oriented information needs. The former related to a discrete problem representing a discrete need, which once resolved should not occur again, while the latter is about information needs that grow logically out of the previous needs. Ellayan (1988) reviewed the literature of information need and use in medical informatics. He wrestled with the meaning of need versus use and finally settled on a simple definition of information need, which is based on works of Line who had also defined information need as "what an individual ought to have for his work, his research, his edification," etc. in (Hewins, 1990:149).

In spite of the growing number of studies on the concept, the concept is to date neither well understood nor clearly defined. Many researchers have said different things to

describe their understanding. And all of them could be right in their own ways. What appears to be important to note at this stage is that the concept “information need” remains rather a subjective and abstract concept existing cognitively in the mind of an individual experiencing some or other inconsistency (Smith, 1991:90). The main focus is not any more on the concept “information” which in itself is a problem to define but on the “need”. What exactly does “need” mean in relation to information provision? Does “need” mean the same thing as “demand” or “want “ for information? Line’s (1971: 68) study was the first to highlight this issue and provided a useful insight as a starting point when he questioned or wondered whether “need” meant the same thing as “demand” or “want” and vice versa. “Need” was further complicated by the necessity for clarity about which needs for information were actually meant since needs were also in categories, for example, physiological, affective or cognitive. As if little attention was paid to Line’s concern, Louw revived the debate quoting Rowley and Turner when they distinguished three types of requirements that an information provider must bear in mind in deciding what type of information should be provided to users. These requirements are a *need*, a *want*, and a *demand*. These requirements are distinguished thus:

“A *need* is generally conceived as describing what an individual *ought* to have for his work”

“ A *want* is what an individual would *like* to have; a want may or may not be translated into a demand on...
(an information service)

“A *demand* is what an individual *asks* ...(of an information service) (Louw, 1979:53)

Rowley and Turner advised that all three types of requirements of the users of information service need to be monitored continuously to ensure that the service accommodates changes in the requirements of users. Rohde (1986:52) raised the same concern and came to the conclusion that little attention had been paid to the concept in relation with “*demand*” and “*want*” and what category of need. The studies of the scholars Line, Rowley and Turner, Louw, and Rohde, provide clues which could help researchers and information providers identify “*need*” from “*demand*” “or *want*” for

information. But it is the considered opinion of this study that, “*need*” is more sociological, “*demand*” is physiological and therefore imperative while “*want*” is psychological and therefore personal. The position as to which is meant, is not static. It keeps shifting circumstantially. An individual may start with any; a want, or need or demand, depending on the nature of the information requirement. But a researcher or politician cannot of course start with *want* if what s/he wants to do is outside the self. Each starts from identification of the problem. They therefore start with *need*.

In bureaucracies where command is the method of getting things done, the starting point appears to be *demand*. So what is the difference? And where is the difference? That is where the crux of the matter lies. It could perhaps be assumed here that the starting point is an agreement that “*need*”, “*demand*” or “*want*” all originate from the mind of an individual. The word, ‘need’ is used here as a collective noun to refer to each and all of the many reasons why we need information for participating in the informal sector. For this reason there appears to be a consensus among scholars who say that information needs are biological and psychological (Kaniki, 1999:193), and therefore exist cognitively within the preceptor’s system (Smith, 1991:90; Stonier, 1991:261). As to the difference, one could say that the concepts are so intertwined that the difference is as thin as a razor edge. It would be safe to say that while indeed there was need to get to the bottom of the origins and meanings of those concepts, the important point at this stage would be to ask, what are we looking for? The meaning? Or the needs? Or both? Arguably, both would be desirable but the focus of the study is partial to the needs. If it were the definition and development of concepts then this would be the realm of epistemology, which this study would not get into. The aim is to identify needs to solve a problem. This focus should not be lost to the course. This is the line of this study. Likewise, as to whether the needs were expressed, or felt, or unexpressed, the dividing line is how the need was presented and what comes to matter is not its philosophy but the implications of the need.

Looked at that way, do information scientists in recent years see some consensus seeming to emerge? What is emerging is not the definition and development of concepts. Rather it

is a problem-solving aspect that is considered. The recurring pattern seems to follow this line. It is the same line of thinking that is followed here. One scholar, (Kaniki ,1999:192-3), illustrates this position by offering an explanation using a hypothetical example from a South African family. He says that there are several situations or instances in which or when a person, group of persons or community, encounter problems, decision-making, or question answering situations, but do not have ready or in-built solutions. In this state, the person or community experience or develop a gap, or find themselves in a stage of lacking some commodity that must be filled. To illustrate this need, he uses a scenario of a parent living in a rural community whose child has passed matriculation examination to enter college but he neither has enough funds nor source of income to take the child to college. This instance or situation would be considered a problem to the parent or a gap that must be filled with some commodities. One of the commodities that is lacking is information necessary to deal with a situation. Lack of it constitutes an information need, which he defined as... “the state of lack of desirable requisite(s) or commodity (namely, information) necessary to deal with a situation as an individual sees fit” (Kaniki, 1989:19). It is obviously a need of information and information is the difference between two knowledge states (Mizzaro, 1996:241).

Therefore, despite the different analogies used or perception of information need by different scholars, the common ground, however, is that information need is embedded in the studies of users, their environment, and the information use (Devadason and Lingam, 1997:50) and it is biological and psychological (cognitive) (Kaniki, 1999:193). Used in the context of this study, an information need is understood as... the situation that arises when the informal sector entrepreneurs encounter work-related problems. Entrepreneurs realise that there are gaps in their knowledge structure and wish to resolve the deficiency in order to solve the problem. The problem could manifest itself in different ways such as awareness, decision-making, informing work-mates, learning new skills, overcoming job barriers, dealing with problematic situations, or just understanding the situation. Put in another context, information need is understood as “the extent to which informal sector entrepreneurs have exhausted use of the available information resources, their preferences or priorities as well as the degree of expressed dissatisfaction with the

information availability and are expressing need for information outside what is existing” (Apalayine and Ehikhamenor, 1996:386). In other words, the satisfaction of information needs would be realised in two different ways. The first possibility would be to produce, observe or find information from oneself, in ones mind or memory. The second would be to try and find the needed information amongst the store of information accumulated by mankind. The latter possibility results in the seeker of information either going directly to an individual who knows, or to a record of that knowledge (Smith, 1991:91).

4.2.3 Conceptions of Information seeking

A lot of attention has in the past been paid to information needs and information use in information studies. And a lot more attention has been paid to information needs than information use. This is particularly visible in the coverage provided by the different editions of the *Annual Review of Information Science and Technology (ARIST)* and other isolated studies in different parts of the world. Arguably, this was a correct thing to do if the right information systems and services were to be provided. The centre of interest was the information systems and services and, how to make these more relevant to their users which in retrospect required knowing the information needs of these users. However, in recent times, beginning in the 1980s, attention has been shifting towards information seeking as a concept and as the process. Such research has attempted to depict the characteristics of users as a sociological group which, *inter alia*, tries to explain the steps people take to satisfy their information needs (Itoga, 1992:331). The anchor in information seeking is the individual as opposed to the institutional information system. Evidence of this shift can be seen from the works of Kuhlthau, (1991), Belkin & Vickery (1985) and Borgman (1984). Their approach centres on the user’s problem in the process of sense-making, stressing that the effectiveness of information retrieval must consider the integration of results into the user’s own life as well as the user’s evaluation of the usefulness of the information for the resolution of the problem Ingwersen (1982); Kuhlthau (1991:361). And therefore, the growing need is to learn more about this information user as he goes about constructing sense out of his information process.

Among the earliest of studies in information seeking is the widely known work of Taylor

(1968: 178-194). In his question-negotiation and information seeking in libraries, Taylor highlighted the communication functions of libraries and similar types of information centres in helping the information-seeker obtain information. He states that in information seeking, there are two phases of interface, which revolve around the process of negotiation. An information-seeker takes one or both of the two phases, that is, working through a human intermediary (reference librarian), and/or through self-help whereby the information-seeker attempts to sharpen his question by interacting with the library and its contents. In recent times attention has been paid to information seeking from the user's perspective, the inner self of the information user. For instance, Kuhlthau (1991:361-371) describes information seeking as a user's constructive activity of finding meaning from information in order to extend his or her state of knowledge on a particular problem or topic. This activity incorporates a series of encounters with information within a space of time rather than a single reference incident. In this context, argues Kuhlthau, information seeking is a process of sense making in which a person is forming a personal point of view. This is what Dervin stated two decades ago. More about this is discussed in the next chapter.

As a concept, information seeking is generated by the need for information. A person seeks for information for some reason. The reason may be described in theoretical terms such as anomalous state of knowledge (Belkin) or gaps in one's life path, or an inability to make sense out of a situation (Dervin), but the person is driven to seek information in order to address some problem perceived by him or her (Robins, 1996:137). Information seeking is therefore explained as that activity an individual undertakes to identify a message that satisfies a perceived need. In this context, information is [the substance or] something which is viewed as any stimulus that reduces uncertainty Davis (2000:57). Krikelas's words recount.

From the preceding paragraph, it is interpreted that information seeking is a process. It is a process because it is a form of problem solving that goes through problem identification, source selection, problem articulation, examination of results and extraction of information (Marchionini, 1992:158-9). And once relevant information has

been located, a user studies it, copies and integrates this information so that it is used to solve the problem. In this sense, information seeking manifests as a form of behaviour that is observable and reflexive (Itoga, 1992:341).

Considering it from the modelling viewpoint and standing it on Marchionini's (1992) conception, the problem is what creates the need for information; the process is the series of information activities the troubled individual takes to look or seek for the information from some information system. The system and its sources are interrogated, information if found is sought, extracted, and integrated to the existing information in the mind of this person thereby leading to the use of the information. This fits well into van Lill's (2000:40) provisional model showing the relationship between user needs, user information behaviour, information use, and the formal information system. The minor difference though is, the information system. van Lill considers the system as only the formal. But in this study, the system is much wider, including the formal and the informal.

4.2.4 Conceptions of Information Use

Common-sense links need to a purpose. The need for something implies that what is required will sooner or later be put to some use or satisfy some requirement. That something in this study is information, which is used for actions such as making a decision, solving a problem, or doing something else. This is how information need and "information use" are linked. One is the continuum of the other.

The term 'information use' means a purposeful recourse to an information source, or deliberate and active exposure of oneself to its content with the hope of obtaining useful information from it (Apalayine & Ehikhamenor, 1996:368). If this hope is blessed and the information so required is attained, it will presumably be put to use. This means information use is a social action that is distinguished by a motivation to achieve some goal (McQuail, 1984:47). Well explained in mass communication, and supported by a theory, *uses and gratification theory*, motivation is an activity that is related to the attainment of gratification or the avoidance of some deprivation. This approach takes on

the belief that people have complex needs that they seek to satisfy and that these needs can be satisfied in a variety of ways (Fiske, 1991:151) such as sports, leisure or work. The *uses and gratification theory*, is founded on the premise that the media consumer controls the mass media message. It views the members of the audience as actively utilising media contents, rather than being passively acted upon by the media. The audience is assumed to be active and goal oriented. The focus of the theory is not what the 'media do to people' but 'what people do with the media.' It suggests that basic human needs motivate individuals to attend to particular mass media and to select and use messages in ways they find gratifying (Mersham & Skinner, 1999:179). Alternatively, some members of the audience may have no use for this information at all.

Closely associated with uses and gratification is dependency or addiction to something. Again used in the context of mass media and supported by a theory, *dependency theory*, it is suggested that people will fulfil their needs with the media in different ways. Originally proposed by Sandra Ball-Rokeach and Melvil de Fleur, dependency, according to Mersham & Skinner (1999:181), develops when certain kinds of media content are used to gratify specific needs or when certain media forms are consumed habitually as a ritual, to fill time or as an escape or distraction. For example, a taxi commuter may come to rely on tapes or CDs for entertainment to minimise distraction on long, cramped journeys. Similarly, a teenager may become dependent on videos. The two examples bring this discussion to the context of this study. Some questions are raised as a way of gaining re-entry to the study. These are how do the two theories relate to the study of information needs and uses? And more so the information needs and uses of the informal sector? The issue at hand is gratification. It is stated earlier in this section that information use is a social action distinguishable by motivation to achieve some goal or avoidance of some deprivation. Precisely because use of information means consolidation of the state of knowledge in an individual, gratification is assumed especially when the quantum of benefit derived from successful use of information is greater than before use of information. And because an individual may trust particular sources for information or particular channels means that there is a likelihood of dependence on these sources. It could imply validity and reliability of information attained from the particular sources.

How? Because entrepreneurs, like other human beings, are never complete with each and every information source they require for their work, they have to look for this information. One or many sources may be consulted. One or many channels may be used. Luck can strike and information is found within the first search, or it would take a long search involving many sources or channels. Certainly and humanly too, getting the crucially needed information will be a small victory to the individual. This is what may be described as gratification. More to that if this information is put to use and significant results are achieved or information accelerates action, for which it was needed, another victory will have been scored. If still, over a period of time, the same sources are consulted or channels are used and are found reliable, the entrepreneur will always go back to such sources or use those channels again and again. This is how dependency is established. The inverse of this would be the stress resulting from acting without relevant and timely information. The individual and the enterprise would stand at an immediate disadvantage. This can be costly in terms of time, business and profit (Dalton, 1989-90:24-25). On that basis, it can safely be argued that both theories are relevant to the present study.

Smith (1991:91) suggested that the use of information by recipients may be examined with reference to the attributes of the information obtained and factors related to the settings in which information is used. These attributes include relevance, timelessness, locateability, and usability. The following factors have a further effect on the use and value of information. There are ways of how information is used, which include its use for decision-making, problem solving, calculation, verification, and so forth. Within this are characteristics of the individual seeking information, including preference for cognitive complexity or simplicity. There is also the extent to which they differentiate information and label of information; social and organisational factors, including characteristics of work team, work organisation, and the belonging to a particular grouping; task requirements, including whether the problems encountered in a task are recurring or episodic.

Writing at that time, Paisley (1980), stated that the medium of communication has a

profound effect on the use made of information. Messages may be communicated by means of various combinations of mode and channel. The mode of information transfer is the physical state in which it is encoded such as oral, hand-written, printed and electronic coding. The channel of communication is the medium or other arrangement by which information is conveyed from sender to receiver. This can be the oral mode, where information can be conveyed by means of a casual conversation or formal speech, while in the printed mode it can be conveyed in a journal or a book etc.

The range of channels an informal sector entrepreneur can employ to acquire information are normally categorised as *formal* channels and *informal* channels. The formal ones involve written and/or printed modes of communication while the informal ones are those mostly involving oral transmission. Smith (1991:91) moves a step further to say that *formal* and *informal* channels, in turn, can be either personal or impersonal. The main characteristic of impersonal channels is that the information is first recorded and then transferred by means of a medium such as a book or journal. Garvey & Griffith, Meadows in Smith (1991:91), state that personal communication involves individuals and can be direct, from person to person, or indirect via a third person or a number of persons. He makes a further distinction between *direct* and *indirect* channels of communication. Direct channels usually contain information being sought, while indirect channels lead the user to the source or channel containing information. Thus communication channels are selected not to maximise gain in the information obtained but to minimise the cost in terms of effort that must be expended to access information (Salasin & Cedar, 1985a: 94-102). This is logically correct. In this study, the informal sector is being looked at as a business system whose information use would be understood as a purposeful recourse by its entrepreneurs to information sources by whatever channels or means to gain information for action and / or sustained competitive advantage (Taylor and Farrel, 1994:45).

4.2.5 Conceptions of the informal sector entrepreneur

An informal sector entrepreneur is a small businessperson who runs a micro and / or small enterprise of some sort. He/she is the person whose effort, time and money are tied

up and consumed in the daily task of keeping going, and trying to be successful. He/she is motivated by a desire to rise above poverty and to strive for autonomy, monetary gain and employment. He/she displays initiative and creativity, and develops an informal management structure, which accommodates flexibility. His/her characteristics tend to become more formal as the business grows. His/her investments are normally very minimal. He/she is almost always found working alone, as owner operator or as unpaid micro entrepreneur, or with a few helpers. Family labour is abundant in his or her business while he may have some paid employees. Initial capital is in most cases comprised of personal savings, although relatives or some credit institutions may supply a loan. The informal entrepreneur can be working in very trying or unfavourable conditions. In most cases s/he can be found working along walkways, verandas, inside buses, bus parks, or physically mobile or occupying the peri-urban zones of towns. Even in a rural area he/ she may be found making small implements, fishing or seeking articles in the weekly village market. Common examples are the vendors and hawkers on the streets who are often regarded by officials as an impediment to traffic. The informal entrepreneur may be running a simple repair service or a wide variety of other low technology market stalls. He or she is involved in simple labour intensive agro-processing operational activities (USAID, 1994:3) such as grain milling, rice husking, handicraft production. This type of entrepreneur has a low level of assets or income. He/she is a common person's friend in the rural setting, and an extremely busy entrepreneur relying on personal energy and brains to accomplish tasks. His /her earnings are usually very low. In official statistics, their category is least counted. Even their contribution is not fully accounted for, but he/she is found trying. In addition to this he/she is the person confronted by the need for information and is therefore an information seeker, information searcher and an information user. It is this type of person that the study focuses on.

4.3 The conceptual framework

Conceptual analysis of terms is the subject under discussion in the preceding section. Concepts play a significant role in the constructing of a model (Rijsbergen, 1996:1) for studying the information needs and uses of the informal sector in Uganda.

The basic proposition of a framework of studying information needs, information-seeking and use (INS&U) has been developed on the basis that occupational (task-oriented) information needs and uses are influenced by individual, external environment, work environment, and situation task factors. INS&U is understood as being part of the task performance process, and the INS&U itself is understood as a process. As a process, various methods are used to gather information on the many factors, which influence information needs. The approach used is based on a step by step movement from outside the sector (external environment) and ending inside the sector (internal environment). In the external environment, attention has been paid to government regulations as well as political and socio-economic conditions in the country. In the internal environment, the individual work environment itself, tools, materials or supplies and the nature of customers have been studied in order to establish the information needs and uses. The alternative could have been to begin from inside the sector in order to arrive at the external environment.

Before describing the proposed framework, it is reiterated here that information needs, information seeking and use are seen as indicators that anomalous states of knowledge existed among the informal sector entrepreneurs leading to their seeking for information. Belkin's theory of *Anomalous State of Knowledge*, (ASK) explains this very well. Secondly, seeking information is seen as a dynamic process influenced by many factors already mentioned above. Kuhlthau's *Information Search Process* (ISP theory) describes this aspect. Information use is dependent upon the sense that the entrepreneur makes out of the information acquired. Dervin's *sense making theory* was considered to be satisfactory at this stage. Ideas from these models, the methodology drawn by Devadason & Lingam (1997) for the identification information needs of users, and Saracevic's (1996:211) information use model called the *Acquisition-Cognition-Application* (A-C-A) were used in constructing the methodology for studying information needs of the informal sector in Uganda. The A-C-A model is based on the assumption that users seek and acquire information in order to use it, and that use is first connected with cognition (cognitively processing and absorbing information), and then with inferences toward

application to a situation that gave rise to the whole process to start with.

Step 1: Study of the Sector

The first step towards identifying information needs was the study of the informal sector. A review of the informal sector literature revealed that the sector is heterogeneous with broad taxonomic classification. Knowledge of the scope and composition of the Informal Sector was very important at the initial stage because it was that which gave direction regarding the activities or trades to be covered while identifying the information needs and uses of the sector.

Step 2: Study of the organisation of the sector and its environment

The study of the informal sector and its relation to the environment is significant in this study. The informal sector in Uganda is found in both urban and rural areas. A study of environmental factors was important because they are determinants to the behaviour of the organisation of the sector. There were cultures that had an influence on the sector. There were also regulatory measures by government, which influenced the sector. Other factors within the environment that had influence on the sector included: market, national income levels, sources of credit, skills levels, type, location and ownership of the business. A deductive study of the environment vis-à-vis the sector gave a macro or broad understanding of the sector and all those factors that had a bearing on information needs.

Step 3: Study of the Informal Sector environment

From an external environment the process moved to the specific environment of informal trades and specifically to the business units. By employing the observation technique, the study was able to identify the nature, type and size of business units, persons operating the business units, the nature of the surroundings, activities going on, organisational structures, scope of activities, types of raw materials/inputs used, products/processes, details of plant, machinery, equipment and other facilities, information flow within the business unit (external and internal), and the channels and media used. Various studies suggest that information needs and uses can be inferred through observing the work

environment. A clue about information needs, the information-seeking process and information uses came out of this stage.

Step 4: Study of the informal sector workers

At this stage, contact was established with entrepreneurs and interviews or discussions were held in order to identify information needs and usage. This was done in two stages: the first entailed a search to determine the demographic characteristics of the workers, while the second involved an investigation into their information seeking habits. Characteristics of workers that influence information needs include: gender, age, marital status, level of education, skills levels, work load, income levels, type of employment, length of service, activities involved in before joining the sector, reasons for joining and continuing in the sector, motivations etc.

The information seeking behavioural aspect endeavoured to find information on types of information sought (always and sometimes), sources of information and services, relevance of different sources and services to work situations, frequency of use, availability and accessibility of sources, information preferences and priorities assigned to different sources and services, modes of presentation, and record keeping. The critical incident technique was applied for this purpose. A retrospective timeline technique was used to keep the interviewees within the specified time limit so that they did not wander too far into the past and start resorting to fiction. A cut off period of three months backwards was considered sufficient to enable them to remember their immediate past. Some could remember past this time line.

The outcomes of this exercise gave a clearer picture of what the information needs of entrepreneurs were and how information was used by the entrepreneurs.

Step 5: Study of information needs and information seeking

With a fair knowledge of the informal sector and characteristics of the entrepreneurs, the next step (step 5) was to formally interview them about their information behaviour. At this stage, the study was in a position to ask relevant questions, seek clarifications and

other points from respondent entrepreneurs. The questions were specifically designed to gather data on the types of information sought (always and at certain times), the sources of information and services, relevance of different sources and the services to work situations frequency encountered. The questions also probed to find answers related to availability and accessibility of sources, information preferences and priorities assigned to different sources and services, modes of presentation, and record keeping. Answers to these questions yielded data about the information needs and uses.

The information seeking behaviour aspect probed for information on how information was accessed and how these sources were used. The questions sought to find out if certain channels were used directly or indirectly and whether entrepreneurs experienced barriers with regard to information access. The inquiry revolved around the day to day movement of the entrepreneurs in their information seeking activity. The *critical incident* technique was applied for this purpose. The retrospective timeline technique was once again used to keep the interviewees within the specified limit, as was the limit of one month's past experience. However, they could remember as far back as when their businesses started. There was no harm in accepting such impressions. The outcomes of this exercise definitely gave a clear picture of what the information needs entailed and how information was sought.

The information use aspect sought for information about the usage of the acquired information. In particular, it sought for an understanding of the assistance that information gave the entrepreneurs in their places of work, particularly with regard to the type of such information, the use to which that information was put, the extent of use, and the degree of dependence on that information. Furthermore, it sought to find answers on aspects of work that were dependent on information but without using information immediately, those functions that were wholly dependent on information in order to carry them out, and those which could be done without looking for information. At the same time each entrepreneur was asked to provide an impact assessment of information on business, and how the information helped the informal sector.

The information use aspect was based on the assumption that entrepreneurs seek and acquire information in order to use it for their work. The information could be needed for decision-making, problem solving, or answering questions. Whichever applied, information once extracted from a source, was evaluated and matched with existing personal knowledge before being used.

Evaluation is a cognitive activity involving extraction of information, its absorption, processing, matching, recall, and use. This is an aspect of sense-making. Use signifies that the information thus acquired and evaluated enables the tasks that gave rise to the problem to be solved or completed.

The value and impact of information was measured at this point. At this stage the information action was concluded. The terminal action indicated successful use in which case gratification was achieved or a failure was registered. Whatever the outcome, the direction reverses internally within an individual to the starting point. The process could take a short time, days or even weeks – but it is significant to note that the information action is not a one-way process. It uses different pathways, forwards and backwards, until each information action is concluded or completed.

Step 6: Analysis of data.

Since the study involved several entrepreneurs, and using different techniques, collating their ideas was the next stage. At this stage the study was looking for meaningful data from what was collected from steps 3, 4, and 5. Sifting through the maze of data required editing, coding, and generating of themes as the processing of data proceeded. The statistical packages, SPSS and EXCEL were used to deal with qualitative and quantitative data. Appropriate interpretation is applied to analysed data. This is dealt with in chapter six and the results are reported in chapters seven to nine.

Step 7: Information needs, information seeking behaviour and information uses

The outcomes from analysis are found in the information needs, information seeking patterns, constraints, and information uses. The model process is graphically represented as follows.

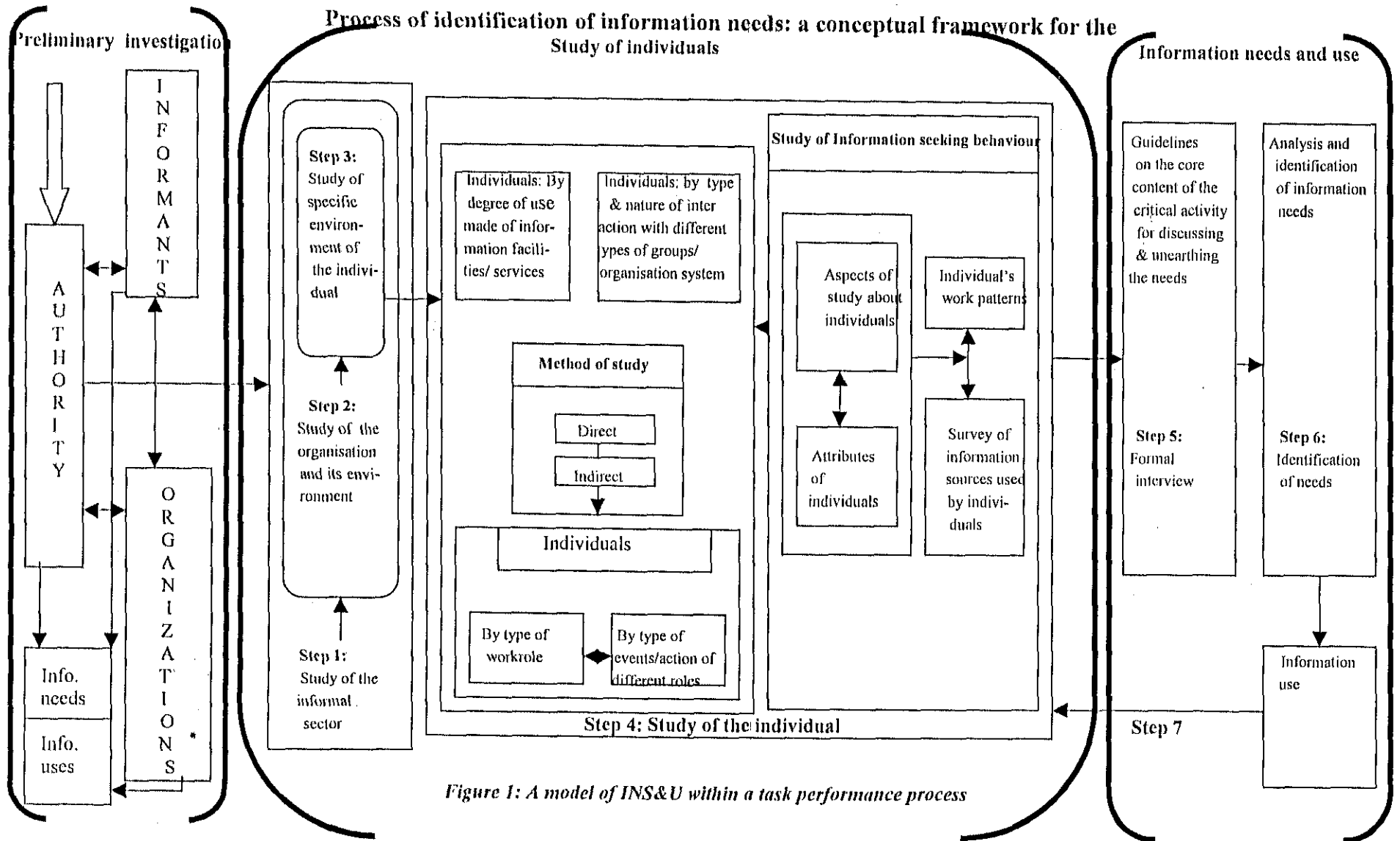


Figure 1: A model of INS&U within a task performance process

Source: Adopted and adapted with minor modifications from: A methodology for the identification of information needs of users. Devadason, F.J and Lingham, P.P. 1997. *IFLA Journal* 23(1):44-45.

The model shows a seven-step process of identifying information needs and uses. At the end of the seventh step, the process reverses to the individual whose needs have been identified and who used the information. The arrows show linkages (information-seeking movement) between steps. The direction shows forward and backward linkages. There are three main areas to the framework: Environment, entrepreneur, and analysis. Each component has specific details that it deals with.

Through these steps, using basically the qualitative methodology, the study allowed an examination of the entrepreneurs (their information behaviours and interactions) within their social context. In this way, the study by conducting in-depth interviews and observations derived qualitative data that provided for the development of theory to evolve automatically. This was the grounding of the study that is recognised through a theory, the *grounded theory*. The grounded theory approach developed by sociologists Glaser and Strauss (1967), Strauss (1987); and Strauss and Corbin (1990), is a methodology that is designed for exploring a subject area and “theory building” in a subject area where previously little or no data existed. The study of the information needs and uses of the entrepreneurs in the informal sector of Uganda is one of these studies where there was very little known. Ellis and Spink have used this particular methodology in information science (Cole, 1996:394). Its use has been defended by Weingand (1993:17-23)

4.4 Summary

The information needs, information-seeking and information uses are three interrelated concepts of information behaviour. The study required that these concepts were well described and understood as the basis for identifying the information needs, establishing how information is accessed and how information is used. This chapter attempted within its scope to analyse these concepts as a basis for developing a model for studying the information needs, information-seeking and information use in the informal sector in Uganda. The informal sector entrepreneur is also conceptually elaborated. These four concepts provided the input for the conceptual framework.

The study brought into focus the theories of information behaviour that are relevant to the study. They are relevant because what the study found corresponds with the theory behind each one of them. The four theories were: Belkin's *Anomalous State of Knowledge ASK theory* and Strauss and Corbin's *grounded theory*, Kuhlthau's *Information Search Process theory*, and Dervin's *sense making theory*.

Ideas from Devadason and Lingam's (1997) *methodology for identifying information needs and uses*, and Saracevic's (1996) model of *Acquisition-Cognition-Application* were considered when developing the framework used in this study. The only difference here is that while Saracevic's acquisition involved the use of a computer, in this study, several sources such as word of mouth, seeing, participating etc. were used without the help of a computer.

The framework consists of seven steps. Each step deals with a specific aspect of the methodology of working towards identifying the information needs and uses of the sector. Together they contribute the track followed in the process of identifying what the study set out to achieve. These steps are described and translated into the schematic representation.

The next chapter, chapter five, is a literature review of the three concepts conceptually dealt with in the present chapter. The chapter draws its sources from various disciplines such as marketing, linguistics, health, business, psychology and information science *per se*. It is an accumulation of thoughts of various thinkers drawn into the context of this study.

CHAPTER FIVE

INFORMATION NEEDS, INFORMATION SEEKING BEHAVIOUR AND INFORMATION USES: A REVIEW OF RELATED LITERATURE

5.1 Introduction

The field of information needs and information uses in library and information science is broadly defined as that which is concerned with information seeking, determining users' needs for information, and information use (Julien, 1995:1). The extent of literature on information behaviour within the field of information science is recorded on a number of occasions to run into several thousand reports and journal articles (Devadason & Lingam, 1997; Westbrook, 1993, and Dervin & Nilan, 1986) and citation indexes. Literature pertaining to this field is spread across many disciplines (Hewins, 1990:145), an indication that information science has no monopoly over research in information needs and seeking (Wilson, 1994). The trend seems to be recognition of the interconnectivity of disciplines involved in research on all aspects of information, including information needs and uses. Several disciplines are concerned with the understanding of how people seek and make use of information, the channels they use to get information, and the factors that inhibit or encourage information use. For example, the study of personality in psychology, that of consumer behaviour, innovation research, health communication studies, organisational decision-making, and information requirements in the information system design (Wilson, 1997:551) are all topical areas in which information needs, seeking behaviour and information use are prominently studied. This multi-disciplinary nature of the field makes it appropriate to review studies from these fields as well to establish whether the findings apply to the information needs and uses of the informal sector. This chapter does not re-invent the wheel. It does not repeat what is covered in chapter 4. Chapter 4 was about defining the concepts and establishing the framework for studying information needs, information seeking and information use. This chapter reviews studies on information needs, information-seeking behaviour and information uses in order to establish their relation with informal sector information behaviour. It does not any more define the terms.

5.2 Literature of information needs, seeking behaviour and information uses

Literature on information needs, information seeking behaviour and information uses is found to be spread over many periodicals, indexes and abstracts, and other reference aids world wide. It is also important to recognise that research in these fields follows different patterns. Some studies attach their researches to certain subjects, while others dwell on individual information behaviour *per se*. Some studies are based on empirical research while others are conceptual in nature or represent numerous viewpoints or paradigms and approaches such as positivism, constructivism and criticalism.

5.2.1 Information needs

Studies of information needs have a long history. A summary of these studies reveal that the objectives of studying information needs and uses may include (a) the *explanation* of observed phenomena of information use or expressed need; or, better yet, (b) the *prediction* of instances of information use; or, still better (c) the *control*, and thereby improvement, of the utilisation of information through manipulation of essential conditions. The achievement of such objectives must be preceded by certain creative activities: (d) the *description* of observed use, (e) the *definition* of convenient and appropriate concepts for describing and dealing with information use, and (f) the *theorising* of causal or quantitative relationships between information use and associated factors. The six activities italicised above are the essence of rational science. Similarly, the study of information needs and uses is primarily the study of behaviour and experiences of [people] in confrontation with their information world using discrete and observable channels. These means information needs should not be treated as psychological or physiological states. They should be considered as a hypothetical agent for information seeking behaviour (Itoga, 1992:341). As an agent, information need creates action, a reaction that is impelling. Generally speaking, a need is the fact of, or feeling of, the lack of something (*Collins English Dictionary*, 1991:1044). This compulsion to seeking information or behaviour in a certain way towards information is a motive. Wilson (1997:553) acknowledges information needs as emerging from motives. He describes three kinds of motives namely physiological motives (for example, hunger and thirst), unlearned motives (including curiosity and sensory stimulation), and social

motives (the desire for affiliation, approval or status, or aggression). These motives correspond with his earlier work (Wilson, 1981), in which he analyses needs as being physiological, affective, or cognitive. Wilson stresses that the concept of *motive* may be of general use in the study of information-seeking behaviour since, if it is assumed that, for whatever reason, a person experiences an *information need*, there must be an attendant *motive* actually to engage in such behaviour. He develops this point with a reference to the general theory of motivation, which suggests that, when a motive is activated, a *belief-value matrix* within the individual is called on. The matrix contains images of objects that past experience has proved relevant for the satisfaction of the aroused need and that different objects will have different values associated with them relating to the believed level of success they will have in satisfying the person's need. Therefore the need is the basis of information use: ...needing is the only prerequisite, because it is the possession of a need that defines a user Westbrook in van Lill (2000:42).

The notion of motive is implicit in the *gratification theory* (Fiske, 1991:151) developed in mass communication research. The assumption of the theory is that an audience has a complex set of needs that it seeks to gratify through the use of various media. The theory suggests that people are active seekers of information to gratify their needs (Rubin, 1986:281-301). This suggestion provides a reasonable supposition that the informal sector too has information needs to gratify. Reinforcing Fiske's ideas is the earlier work of McQuail who suggested four main categories of gratification in the context of affective needs, but for which, clearly, information may have a role in drawing attention to those things that will produce gratification. These are diversion (escapism, emotional release); personal relationships (companionship, social utility); and personal identity (comparison with life, reality exploration), and value judgement. This model is modified for application to the present study because the thinking is that gratification is equally achievable when information has been used for business purposes i.e. the economic value of information.

Many studies of information needs have also been carried out with the intention of designing appropriate services (Kebede, 2000:157). These studies are justified because

the success of information services relates directly to how well needs of clients are known. Success in information services is more likely to be achieved through adjusting the services to meet the specific needs of an individual rather than trying to adopt the user to match the whole output of an information system. It is for this reason that Dervin and Nilan (1986:3-33) were critical of studies that end up discovering the information needs of the information systems being studied rather than the information needs of users.

Discussing specifically business information needs, Allot in Dalton (1989-90) believes that business information satisfies the need for relevant data which, in whatever format and from whatever source, enables an informed decision to be made and subsequent action taken by a firm. Allot identifies information needs for small business enterprises at two levels: immediate information needs and prospective information needs. She defines immediate information needs as being specific items of information required for answering immediate concerns. This is likely to occur in a crisis situation in which time and cost are of the utmost concern. How rapidly the demand for information can be satisfied probably depends on the reliability of the personal contact network. Prospective information needs, she says, is information treated as a long-term strategic resource. A document, for example, is kept for future reference and information is filed to access the state-of-the-art in a field.

Mchombu (2000:46-48) discusses information needs for small businesses in a rapidly changing environment, particularly in Africa. She notes that an increasing political instability in many African countries, intensification of government regulations over business activities, particularly those affecting profitability such as quality, safety considerations, taxes, and tough competition as more companies from developed countries are investing in Africa under new liberalisation measures, do give rise to both risks and opportunities for small businesses that could affect their information needs. She emphasizes that studies that have focused on business information needs have confirmed the existence of information needs for small businesses. Quoting Dhua's study about the practice of information demand by small and medium enterprises (SMEs) undertaken in China, she established that business people need a broad range of information on

marketing products, sources of funds, competitors, suppliers of materials, customers, technology, new product development, and foreign trade practices (Mchombu, 2000:47). It is also noted that lack of information led to business failure. Dhua's study established that small businesses were lacking sufficient information. The effect of lack of information on business performance by blacksmiths, bakers, and roofing-sheet makers in developing countries is studied by Carr in Mchombu (2000) who noted the effect of lack of information on availability of credit or technology and limited opportunity for profitable investments. In spite of the important role information plays in business, entrepreneurs had a low level of business information awareness. Developing this further, Antila-Olkku in a study of information services to small and medium sized enterprises (SMEs) in Mchombu (2000:48) found that small and medium size enterprises seldom realized that they had information needs. And even if they recognized their needs they very rarely knew where to go for information. The aforementioned study does not focus on either Uganda or the informal sector, but its findings are relevant to the present study. For example, in Scotland, Enterprise Ayershire was established to provide information and to improve the quality of businesses and increase their overall performance (Farmer, 1993:216). This effort shows how a developed country was solving the problem of information needs of its business people. Although it is not directly relevant to Uganda or to the informal sector *per se*, it is an indicator of a sound approach to information provision to business.

Mchombu (2000:62-63) sought to identify the major information needs of women in small business in Botswana. Findings indicate that information on business management, how to run a business, accounting skills, marketing, quality management skills, technical skills, information on financial assistance/grants, general legal information, marketing courses, information on business diversification, and sources of raw materials as being the most important. There are some similarities between Botswana and Uganda. Firstly, the study is located in an African setting in which case business characteristics in that country are nearly similar to those found in Uganda. Secondly, the study concentrates on women. Even in Uganda women are heavily engaged in business. The study is relevant because it reflects on the same category of business people, that is, African women and

almost the same geographical region. Thirdly, the study is about small businesses. The informal sector is one type of small business found in every country of Africa. This means the study has a bearing on the present study.

5.2.2. Methods of identifying information needs

Noting that people always have information needs, and that these have to be met some way or other, means that the person supplying information must first position him or herself to identify the type of needs. The determination of types of information needs facilitates getting correct or appropriate information and within a reasonable time. And since information needs could be met in many ways, the assumption is that those many ways are actually information systems. An information system can be an individual, or a documentary type. It will be an information seeker versus the information system. The contact between an information seeker and information system introduces some kind of dialogue. The ensuing contact may be face-to-face dialogue, or may involve information seeker, information worker and information source(s). Whatever the case may be, the process of reaching desired information is a form of action research going on. This section describes methods by which identification of information needs is usually carried out.

Methods are the designs for carrying out information needs identification. Other researchers have identified these methods as a survey method, observation method, experimental method, critical incident methods and analysis of documented information sources.

Essentially, survey entails making a direct contact with the inquirer and asking questions seeking answers to information needs, or indirectly by applying instruments like questionnaires or interview protocols. Provided the right questions are asked discussions with groups or individuals can yield useful ideas about information needs. Observation implies watching systematically the person and his information seeking habits, or work site. Done directly, or obstructively, this method can yield ideas of types of information needs. Experiments designed to solicit patterns of information seeking and types of

information required can also be carried out. For example, establishing a small library with particular types of books and allowing students with particular subject interests to borrow these books and noting patterns of borrowing generates ideas about the information needs of particular students. The experiment can be repeated in different sites with the same subjects to determine the information seeking patterns and information needs. The accruing patterns can depict the information needs of those involved. Asking people retrospectively what problems troubled them most, since that information was needed, is another. This method works best provided that it is done repeatedly to confirm the findings. Similarly, reading and analysing records or documents such as circulation statistics, statistical records of an information system, work diaries of individuals [if permissible] can yield a picture of information needs. This is how Rohde accomplished excellent work by collating information needs of the past (Rohde, 1986:55).

5.2.3 Techniques of assessing information needs

Closely related to methods are techniques. Quite often difficult to distinguish are the concept techniques and methods; sometimes they are used interchangeably. By technique, is meant the means or the way by which something is done. In this thesis techniques are instruments and styles by which information needs could be discovered. They are closely associated with the methods that include: questionnaires, interview protocol, observation, critical incident technique, diary technique or social development record, content analysis, rapid appraisal or participatory appraisal, clinical or psychological analysis, community profiling and the nature of information systems available in the community.

A questionnaire is largely a list of issues seeking answers. They are administered to literate persons to fill and return for analysis. They can be administered directly, personally, through someone else or indirectly by post or by telephone. Interview protocol is a structured or non-structured list of issues seeking answers to them. The advantage is that both literate and non-literate can answer them as it involves speech. They can be administered face-to-face, or through the telephone, whichever is convenient. Both techniques, questionnaire and interview techniques, if used wisely, provide insights into the information needs of a person or groups of people. Both yield

quantifiable data that can be summarized and interpreted (Kaniki, 1999:197). Use of both closed and open-end questions is appropriate.

The critical incident technique has been used in information needs determination for some time. It is a job analysis method first described by John Flanagan in 1954. More about it is discussed in the next chapter. However, the method involves the collection of anecdotal descriptions of effective and ineffective job behaviours, which job incumbents, supervisors, and others, observe in the work setting. These anecdotes, called “critical incidents” are specific behaviours that exemplify success or failure in some aspect of the job being analyzed (Fisher & Oulton, 1999; Corsini, 1984:317). It is a technique in which a researcher asks someone, retrospectively, questions regarding past incidences in which lack of information affected his or her work. A timeline of some past period is given so that such individual reflects and possibly remembers hardship moments and gives the answers. In addition to lack of information, other questions must be asked. The kinds of questions usually asked are; how did you satisfy the information need? What difficulties did you meet in seeking for information? If you got the information, did this information help you? If no, how did you go about solving your information need? This technique works best when the problematic situation is coupled with guiding questions.

The personal diary technique has been documented as having been used first by Allen (1964). In this technique individuals are asked to keep a record of their information seeking processes and use over a given period of time. The records are then analysed to identify how and what information was sought, its source(s) how and for what purpose that information was used and perhaps how effective the information was (Kaniki, 1994:11; 1999:197). This technique is obviously ideal for the literate people and a patient researcher and most importantly, those who keep work diaries.

A review of literature on information seeking behaviour or habits is a good source of information for information needs. Through content analysis, information needs, including their types, can be depicted. Citation analysis is an additional technique closely

related to content analysis, which is appropriate for discovering information needs from published sources.

Reference question approach works in such a manner that the information provider is passive and the information seeker is active. It is the information seeker who comes with an information problem to the information provider. An information provider could be a librarian, or any other individual. Through conversation, information needs can be identified.

Rapid or participatory appraisals are qualitative techniques that are gaining prominence in library and information science research. They are particularly well suited for quick results. Borrowed from qualitative approaches of Rapid Rural Appraisal (RRA) and its subsequent improved version, Participatory Rural Appraisal (PRA), this technique provides an opportunity for a researcher and the community to talk together, exchange ideas which focus on the information needs, use and the methods of seeking information. They are techniques that require patience, skill in listening, organisational skills, and serious participation. Because they can be applied to differing communities, the methodology must be carefully planned if it is to be successful (Mchombu, 1992:17-32; Kaniki, 1999:198).

Furthermore, another technique is Belkin's ASK approach, or the anomalous state of knowledge of an individual. It is also the work done by Belkin, Oddy and Brooks, severally quoted by different authors in information science on the information needs, and the identification of anomalous states of knowledge that trigger the use of information. This technique sets out to find cognitive explanations of the origins of needs. According to Hewins (1990) and Kaniki, (1999:196), this approach examines how people or communities seek information concerning situations about which their knowledge is deficient. They pose three categories of situations, that is, problem solving, decision making, or answering questions. Through this technique the affected people are asked how or why they seek information. This is repeated over time at different times to confirm the findings. This approach relates closely with the critical incident, which

recalls experiences. It exploits the psychological status of people concerned. In other words, it is a clinical way of discovering information needs in an individual or community.

Community profiling is an equally reliable technique with which to find out information needs. It is appropriate for planning a new information system or for selective dissemination of information (SDI) service. Once clusters of users are known they can be followed with specific questions that should lead to information needs discovery.

Types of information systems existing in a particular locality or institution is a rough indicator of the information needs of various categories of people. For example, a library in an agricultural research institute, or in a medical research center is directly related to the work people in those professions do and obviously their needs flow along the same line.

5.2.4. Factors generating differential information needs

Information needs appear to be influenced by a number of factors such as work type or tasks (1996:182; Bystrom and Jarvelin, 1995:191; Taylor, 1986:35), facilities, problem, position of an individual in a work environment (Leckie,1996), education, etc. In the study of information needs of English lawyers, Otike (1999:31) generalizes that the information needs appear to be influenced by the type of work they do. It is these activities over any other factor that influences the kind of information required. The same idea has been expressed differently. Information need is either shaped by activity, such as problem solving or decision making, or as latent, that is, manifested through passive reception of information which is stored as knowledge (van Lill, 2000:43). Information needs depend on the work activity of an individual, discipline (field or area of interest), available facilities, hierarchical position of the information seeker in an organisation, motivation factors for information needs, need to take a decision, seek new ideas, validate the correct ones etc Crawford in Devadason and Lingam (1997:41).

An alternative and perhaps supplementary corollary to the foregoing, is the need to define and gain a fuller understanding of the concept *information need* by means of focusing on the causes of information-seeking behaviour. A relatively general theory from psychology used in health communication studies is that of *stress and coping*. Generally, stress is the relationship between the person and the environment that is appraised by the pressure that taxes an individual to the extent that it may exceed his or her resources and endangers his or her well being. Coping as cognitive and behavioural effect to matter reduces or makes it possible to tolerate the internal and external demands that are created by stressful situations. Although used in health communication, stress and coping are subjective experiences that can affect anyone in any difficult situations including entrepreneurs in the informal sector. Stress and coping are important considerations in this thesis because information seeking is never a process of smooth sailing. The beginning could be a distressful event resulting from a problem but exacerbated by lack of information. That is why the concept stress and coping offers a useful proposition for more research on information-seeking behaviour. It is noted that one important aspect that has been found to affect stress is whether the individual has enough information to be able to cope in a given situation, or too little information, which keeps such an individual in a perpetual state of anxiety (Wilson, 1997:554). A simple experience from life can illustrate this. Think of a university student about to sit an end of term examination or waiting for final examination results. The periods just before examination or waiting for results can be traumatic. The student needs a lot of sympathy or encouraging information to be able to cope with the attendant anxiety. This uncertainty experienced by the student can be a harrowing experience, especially if much was expected from the student. Stress will be exerted in the mind but anxiety will be manifest itself in the pit of the stomach. Perhaps more closer to the study, would be the experience of a retailer of perishable commodities like tomatoes or fresh fish in a local market of a tropical country. Absence of buyers in the first seven or eight hours of the day will tell how stressful it can be for such person. In order to cope with the situation, such an individual may be found pacing about and trying to solicit advice on how to preserve his wares. These examples explain how avidly the affected person needs information to cope or get out of stress.

A discussion of information needs can be sequenced into: (1) factors that generate differential information needs and (2) types of information needs. Information needs may be influenced by the systems available to satisfy them. Other environmental factors such as social, political, economic and legal systems within which a person operates and interpersonal relationships can be just as important (Rohde, 1986:53).

5.2.5 Types of information needs

A number of information scientists have written about types of information needs and different approaches have been used to express types of such needs. In earlier times, Krikelas for example, based information needs on information seeking, and categorized needs as immediate or deferred, because a need is specific and generally time-bound (Devadason & Lingam, 1997:41). While studying black women in Mamelodi, Pretoria, in South Africa, Fairer-Wessels (1990:365) found their information needs to embrace every aspect of their lives, including economic, psychological and spiritual, health, social, education, political, cultural and recreational. As a result of studying rural communities in Kwa-Ngwanase and Qumbu, South Africa, Kaniki (1994:15) ably categorizes their information needs as basically coping/survival information and helping information. Kempson in Kaniki (1999:193) categorizes needs as perceived, actual or hypothetical. The feeling (or need) can be recognized or unrecognized, expressed or unexpressed. As a consequence, some behavioural act is either consciously or unconsciously triggered off to seek and acquire information to satisfy such a need. Rohde (1986:52-3) and Devadason and Lingam (1997:41) describe needs as being either expressed or articulated, unexpressed or unmet, or deliquescent or dormant, in which case the user is unaware of physiological, affective and cognitive factors. Ojiambo (1993:55-56) expresses needs as normative, felt, or expressed. Weigts, Widdershoven, Kok, & Tomlow (1993:398-429) suggest the following types of needs: need for new information; need to elucidate the information held; and need to confirm information held. Wilson (1997:553) adds the need to elucidate beliefs and values held, and the need to confirm beliefs and values held to the list.

The mode of questioning in carrying out [information] searches has also been identified

as a cause of different types of information needs. Along this line of thinking, Wilson (1997) quotes other contributors who maintain that when an individual sets out to seek information as a result of “needing to know”, three modes of questioning behaviour are exhibited. Namely questions to discover what is happening (orientation); questions to check that the person is “on the right track” (re-orientation), and questions to form an opinion or solve a problem (construction). To those could be added, questions to build ones knowledge of a subject (extension).

Different information needs have also been found to emerge from the previous needs in the course of solving a problem, making a decision, or completing a work related task.

Using the levels approach , Kuhlthau (1991:363) quoting Taylor describes four levels of information need evident in user’s queries as: visceral, an actual but unexpressed need for information; conscious, a within-brain description of the need; formalised, a formal statement of need; and compromised, the question as presented to the information system. These are considered as different types of information needs. Both, Taylor and Kuhlthau argue that in the initial stages of a search, users are most likely to be able to express their need for information in the form of questions, which make connections with their existing knowledge. Thereafter, when specific gaps in knowledge have been identified, users can be expected to express their requests in the form of demands for specific information. This seems to be a plausible explanation on the way in which different information needs find expression.

In the context of information retrieval and using machine interface, Ingwersen in Mizzaro (1996:245) discusses what he terms as the fundamental types of information needs. Namely a verificative need (the user knows the bibliographic data of the needed documents); conscious topical need (the user needs information about a topic that he knows well), and muddled topical need (the user needs information about a topic that he does not know well). The latter is viewed as an ill-designed information need.

Other ways of identifying types of information needs are: through retrospective

questioning of information seekers about their information needs and discovery of the information needs by method of observation.

The aforementioned ways have been found to reveal information needs successfully. Up to this stage, the brief review attempted to demonstrate the point that different factors or situations influenced types of information needs and that there are different ways to express types of information needs. A specific study of types of information needs would cover a much wider scope. Secondly, and most importantly, although information needs are differentiated, they are a manifestation of an individual seeking information in a variety of contexts.

In ending this section, it may be added that information needs may either be recognised by the information seeker him/herself or by the information expert on behalf of the information seeker Kaniki (1999:193). Other intricate information needs may require both the person experiencing the need and the information expert to work together towards “disentangling” and establishing the nature of the actual information need. It may be added here that it is not only the expert who is able to decipher information need(s) but also non-experts who are willing to listen carefully to the information seeker’s narrative. This is a considered opinion based on experience. Furthermore, the aforementioned also implies that many typologies exist that endeavor to classify users and their information needs according to their social, vocational and other attributes as in, for example, women, adults, black people, technicians, scientists and managers. Such typologies are useful, but it should be kept in mind that the same person might belong to more than one category simultaneously, and that needs change as situations change (van Lill, 2000:42).

5.3 Information seeking behaviour

An information need is the cause of information seeking behaviour (Itoga, 1992:341) that can be described as reflexive and observable behaviour. Information seeking is a constructive process in which steps are taken to satisfy the information need. Information seeking behaviour attempts to gain insights into the way an individual goes about looking

for information. It aims at establishing aspects such as who needs information, what type of information is needed, for what purpose is that information sought, when is the information needed, and where can this information be found according to Verhoeren in Ojiambo [1993:57-8]. Such information seeking behaviour, notes Fairer-Wessels (1990:361), refers to the way in which people search for and utilize information

User goals have been identified as the most important factors in defining information-seeking behaviour from both theoretical and empirical studies (Xie, 2000; Belkin, Marchetti, & Cool, 1993).

Analysis of literature on this subject indicates that information-seeking behaviour is based on some general model of what might be called "information behaviour". Taylor (1991:221) defines briefly information behaviour as the sum of activities through which information becomes useful. Activities imply active information searches resulting from an area of doubt or more specifically a recognised problem. By "useful", he means ways of resolving a problem through clarification, alteration, or actual solution as a result of information gained.

Many scholars in mass communication, science (mathematics) and information science have over time constructed models by which to study information seeking and use. A few that are cited here include Wilson, (1997), Ingwersen, (1996); Kuhlthau, (1991, 1993); Dervin & Dewdney (1986). This is not the end. More research and field trials are in progress. What is noted though is that these models are conceptually very closely related while diagrammatically/graphically different. In essence and for the purpose of this thesis, these observations would imply two things: adoption of a model or constructing another. Of the models, Ingwersen's cognitive model of 1992 is adaptable. This model is extensively cited and may as well be considered a universal model of information seeking behaviour. The justification for the choice was that Ingwersen's model describes information seeking purely from the cognitive aspects.

MICROSYSTEMS in IR BEHAVIOUR	DATA Type
<p style="text-align: center;">Pre-information searching behaviour</p> <p>1. User has a problem or goal which needs to be solved</p> <p>2. User's information behaviour arises from recognition of inadequate (anomalous) state of knowledge</p> <p>3. User seeks to resolve ASK by searching for information in system (info.-problem)</p>	<p>User's situation User's goals</p> <p>User's characteristics User's (conceptual) knowledge</p> <p>User's problem statement and User's expectations</p>
<p style="text-align: center;">Information searching behaviour</p> <p>4. "Pre-search" interaction with e.g. human or computer intermediary</p> <p>5. "Pre-search" formulation of search strategy/source-selection/query</p> <p>6. Searching activity</p> <p>7. Initial evaluation of results</p> <p>8. Reformulation of problem/ info.problem/ request/ query/ strategy</p>	<p>User question/request Intermediary's characteristics User/intermediary interaction</p> <p>User/intermediary interaction System's characteristics Query statement(s)</p> <p>User/intermediary/ system interaction</p> <p>User/intermediary assessment</p> <p>User/intermediary interaction</p>
<p style="text-align: center;">Post-information searching behavior</p> <p>9. Evaluation of retrieved text(s) (if any) by user</p> <p>10. Use of information</p>	<p>User satisfaction</p> <p>User satisfaction User's goals</p>

Fig. 5.1. Representation of information search behaviour in the IR interaction process (Ingwersen, 1988, p. 156); modification of Belkin and Vickery (1985, p. 3).

The figure outlines various types of the representative data that user-oriented research encounters in information retrieval. It categorises 10 elements (or Microsystems) into pre-information searching, information searching and post information searching. Arrows demonstrate the recycling possibilities of elements within each category (Ingwersen,

1992:85). Element 1 implies the user's goal space, element 2 is identical to the 'state of uncertainty' and element 3 signifies that the user, having a need for information, "asks" an information retrieval system.

Green (1991:130-148) using the cognitive linguistic analysis summarizes the information-seeking model using a number of sources. She explains concisely the Information-Seeking (IS) Model thus: The information seeker experiences information needs. The needs exist within the information seeker's internal idea space as gaps between constructs. Information needs exist within the information seeker's internal idea space as a degree of emptiness within a container. The information seeker desires information. Information is desired for its relevance to the information need. Information is desired for its (a) intrinsic worth; (b) value, (c) accuracy, and (d) timeliness are emphasised. The information seeker searches for information. The information seeker locates information. The information seeker selects specific information. The information seeker retrieves information. The information seeker processes the information. The information need is satisfied. Utility of information is emphasised. Information is used to build a bridge across a need gap. Structural qualities of information are emphasised. Information is used to fill the need container. Quantity of information is emphasised (p.136). In general terms as explained by Wilson two decades ago (1981), information-seeking behaviour results from the recognition of some need perceived by the user. It is a behaviour that may take different forms such as the information-seeker making demands upon a formal system like a library or from other people such as peers or work-mates. When observed carefully, information-seeking behaviour should manifest as any activity an individual undertakes to identify a message that satisfies a perceived need.

In all models, it is emphasized that the information-seeking activity or process begins with a feeling that one's current state of possessed knowledge is less than needed to deal with some issue (or problem). This is described in theoretical terms as Anomalous State of Knowledge or gaps in one's life path or an inability to make sense of a situation. However, the person is driven to seek information in order to address some problem perceived by him or her (Robins, 1996:137). In this way information scientists view

information-seeking as a process of sense making in which the person is forming a personal point of view. In this state, the individual is said to be actively involved in finding meaning, which fits in with what he or she already knows (Kuhlthau, 1991:361). Information seeking becomes a technique or form of problem solving in which either or both the information sought (problem) and the search process (solution path) may be simple or complex (Marchionini, 1992:157). As a form of behaviour, it is a means (psychological as well as physiological mechanism) towards reducing uncertainty and solving the information needs of an information user. It is a type of behaviour that is normally associated with the psychological and emotional status, dynamics and paradigm of an individual or organisation in relation or reaction to internal and external stimuli. It is expressed through attitude, beliefs, ideology, emotions, feelings, tastes and values, among other internally or spiritually driven expressions (Ocholla, 1999:120-21). This explains why it is closely related to user studies, market analysis, user surveys, information analysis, community analysis and information needs assessment (Ocholla, 1999:127) all of which are widely applied in the study of users needs in library and information science.

The main functions that make up the information-seeking process include problem definition, source selection, problem articulation, examination of results, and extraction of information (Marchionini, 1992:158-159). These according to Marchionini in Xie (2000:843), mean that information seeking requires users to apply their knowledge and skills or “personal information infrastructures.” This could be their general cognitive abilities, their knowledge skills in relation to the problem/task domain, knowledge and skills in general, knowledge and skills specific to a system and knowledge and skills regarding information seeking. This implies information-seeking strategies or ‘stratagem’ as Bates’ 1990, who initiated the concept, called it. Once relevant information has been located, a user must study, copy and integrate this information so that it may be applied to the original problem.

5.3.1. Intervening variables in information-seeking behaviour

Much has been written about potential barriers between the recognition of a need to be

informed and the activation of a search for information. Writing in the context of journalism and mass communication, Gaziano (1997:245), in a comprehensive discussion of barriers, identifies a variety of internal and external barriers to knowledge gain. She states that knowledge gap studies have identified barriers on a variety of topics, relating to both personal and community affairs. She defines knowledge gaps as “differentials in information acquired and retained by people through a learning process” (Gaziano (1997:238). She acknowledges that knowledge gaps and information needs have been shown in a variety of areas such as health, home, family and child rearing, consumer affairs, housing, employment, welfare programmes, law, public affairs and the political process, transportation, education and recreation.

She describes internal barriers as those involving problems on the level of the individual, while external barriers relate to the collective level. Under external barriers, Gaziano lists issues of family socialisation patterns, community identity, social stratification, ethnic membership, and access to the media. Internal barriers to information include motivation and interest in accessing knowledge, involvement and participation in community activities, family socialisation, and the role of interpersonal discussion. She is of the opinion, however, that although it is helpful to differentiate between internal and external barriers, we [or information scientists] should be aware that there is also a crossover among them, in that external barriers may also be internalised by participants and become internal barriers (Sligo & Jameson, 2000:859-860). Though written for journalism and mass communication, this study is relevant to the present study because it describes barriers associated with information-seeking behaviour, which the present study explored and found to be valid also in the context of the informal sector.

Dalton (1989-90:31-32), discusses information problems of the small business owner states that small business owners tend to perceive their information needs as business problems, rather than information-related issues. Even if the small business owner identifies his information need, he may not be aware of the appropriate sources to be used or how to obtain information about these sources. However, if the public library is to render a useful service, the categories of information needs must be carefully defined and

analysed. Major informational problems that Dalton found facing the small business owner included scope and prospects for establishing a business; decision-making; marketing; management; finance; technical; transportation; staff and labour; and expansion and diversification. The study would have to concur that the information needs of informal sector entrepreneurs are actually the same as their business problems, as found in Dalton's study.

Other studies by Dhua (1990), Antila-Olkku (1995), and Mchombu (2000:60-62) regarding problems of businesswomen in Botswana all agree entirely with Dalton's findings that small business people seldom realize that they have information needs. All these studies are relevant to the present study because they pinpoint issues that the present study unearthed and found to be affecting informal sector entrepreneurs as well.

Another outstanding contribution is that of Wilson (1997:552) whose revised model shows three sets of "barriers" to information-seeking behaviour. He equates these barriers to the dimensions of the situation in which a person finds him/herself. They are discussed briefly under various headings thus: personal, economic, social or role-related, and environmental barriers.

Personal characteristics include cognitive dissonance, selective exposure, physiological, cognitive and emotional characteristics, educational level (Wilson 1997:552; Palmer, 1991:255; Fairer-Wesels, 1990:362) and knowledge, as well as demographic variables such as age, sex and other factors. Cognitive dissonance requires a measure of explanation. Described as a theory (Festinger's theory of *Cognitive Dissonance*, 1957¹), cognitive dissonance predicts that people will seek out information that confirms existing attitudes and views of the world or reinforces other aspects of behaviour (Watson, 1996:44). As regards level of education, this factor is often cited as the single most important indicator and predictor of information user behaviour. There is no dispute that people with a relatively high level of education have been found to be more active users

¹ Festinger's theory of Cognitive Dissonance, 1957 In Watson, J. & Hill, A. Dictionary of Communication and media studies. 3rd. ed. London: Arnold.

of information and also use a greater variety of information sources as observed by Fairer-Wessels (1990:362). On the other hand, Fairer-Wessels (1990:362) quoting different sources found that there was a close relationship between aspects such as age, sex; motivation (education) to achieve (socially and economically) and information skills. She also found the same to be true about socio-cultural aspects such as social status and lifestyle; and access to information sources such as the media and experts and organisations.

Economic barriers related to information-seeking fall into two categories: direct economic costs, and the value of time. These could apply either to the process of information-seeking itself, or to the consequent actions. In this regard, it has been found that as the cost of searching for information increases, less information will be sought (Murray, 1991). Lack of time to search for information diminishes one's eagerness to look for information.

Social/interpersonal barriers such as attitude, personal interests and fear can stand in the way of an individual seeking information. For example, in a study carried out by Dorgers *et al* in Wilson(1997) on cancer patients, it was found out that attitude of the specialist and presence of other people during consultation proved to be a barrier to successful information-seeking. In another study on innovation research by Rogers (1983) it was established that behaviour patterns for members of a social system acted as a barrier to change and, hence, as a barrier to information-seeking. Social factors like resistance by vested interests or privileged groups that benefit from the status quo are also reported to act as barriers to access to information and so frustrate an information seeker. It is to be found if attitudes, rather than social systems and benefits accruing from position of responsibility are in some way related to the information-seeking behaviour of informal sector entrepreneurs too.

Environmental/situation barriers are identified as inhibitors to information seeking. For example, prior experience, knowledge, interest, information availability, requirements of the problem, and relevance of the content of information retrieved are identified

environmental constraints that inhibit information seeking (Kuhlthau, 1991:362). Research summarised by Wilson (1997:560) shows similar findings, in that the immediate situation of information-seeking activity can include elements that represent barriers to continuing that activity, and that the wider environment can also present problems. To these can be added other factors such as role, personality, and cost of using information sources.

Emergence of new information technology added a new dimension to information access. While some of the new technology is user friendly, much of it is prohibitive in terms of knowledge requirements and affordability, given the situation that prevails in the country of study. This could prove a big inhibitor to information availability. It is yet to be established whether organisations experienced problems of accessing foreign information due to costs.

Lack of information regarding time (Cameron, Corbett, Duncan, Hegyi, Maxwell, & Burton, 1994), age and geographical location of information source (Connell & Crawford, 1988) affected the reception of information on health issues. In the studies in question, it is reported that the amount of information received from all sources decreased with age for urban residents, while the opposite was true of the rural residents. Older rural women were found to receive large amounts of information from a variety of sources. Ngimwa, Ocholla & Ojiambo (1997:56) report time constraints as hindering to Kenyan women who want to access modern media. The point they emphasized was that the women in question spend most of their time on the farm or attending to other family-related chores, with the result that a day passes before they have had time to even listen to a radio. Other factors noted by the authors, such as low literacy among women, economic and cultural constraints, poor road infrastructure, uneven distribution of electricity and telephone facilities exacerbated the problem of media inaccessibility for Kenyan women.

Although these studies did not focus on business information, they are relevant to the present study. As regards age, there is little debate in the literature on this. It is amply

stated in relevant literature that the informal sector employs people of all ages. That is why this variable was a significant item in the study.

A difference in national cultures is also a fundamental issue in information transfer. For example, Wilson (1997:560) lists the following issues: *power distance* or the acceptance of unequal distribution of power in organizations, *uncertainty avoidance*, or the extent to which a society feels threatened by uncertain situations and so tends to avoid such situations; *individualism*, which is self explanatory, and *masculinity-femininity*, or the evidence of masculine values of material things, etc. versus that of feminine values have been found to affect information-seeking. To these, Hofstede in Wilson (1997:561) adds the fifth dimension, *long or short-term orientation to life*. Unlike Hofstede's power distance, there is a factor in information seeking behaviour called *positioning*. Supported by a theory (*social positioning theory* of Davies and Harre, 1990), positioning means the use of rhetorical devices by which a person and other speakers are presented as standing in various kinds of relations. It is linked to socially constructed subjectivity that affects an individual's information-seeking behaviour (McKenzie & Carey, 2000). For example, a person who stammers and has been once been laughed at during his / her information seeking activity may withdraw into him/herself. An old person may have problems seeking information from young people because in normal circumstances he/she is expected to have a wealth of experience already. An illiterate person would probably have a similar fear when dealing with educated persons. Negative attitudes or reactions such as these create stigmas that have a long-term effect on information seeking in an individual. Adopting a 'position' involves the use of discursive practices, which define the relationship between self and others. In terms of seeking information, positioning creates defensiveness, evasiveness, withdrawal and disruption of information seeking in the short as well as long term. Positioning is an intervening variable. Since the informal sector in Uganda has people with all such features, this study is relevant.

Something inadequately covered in literature is information safety factors and information overload. The general attitude of consciously assuming that 'I already know enough' with regard to information is bad. Such an attitude leads to locking out important

information or carrying an overload of irrelevant information, as indicated by Ackoff in Taylor (1991:229). He feels, we [people in general] really do not know much about information safety factors – so we tend to overload. Too much information in one's self creates distaste for more information and could actually turn out to be a psychological hazard if not observed properly. Similarly too little information could also be a problem (Paisley, 1968:10). According to Kuhlthau (1991:362) some people have a limited capacity for assimilating new information. They purposely construct meaning by selectively attending to that which connects with what they already know. Although this study does not set out to address this issue specifically, it has encountered evidence that the injudicious packaging of information can be fatal. This happened in the case of a person who had died, presumably from high blood pressure, after hearing that the bank had announced that interest on the person's loan at the bank had grown to unmanageable proportions that would mean selling off all his assets and estates. This information caused so much distress that the person collapsed and never regained consciousness.

Limited or unreliable information facilities and infrastructures – or a complete lack of them, together with pandemic illiteracy, may have a detrimental effect on access to information, according to Chifwepa (1997:129). Such obstacles, for example, may manifest themselves in the form of unreliable radio programme schedules, poor road maintenance or lack of roads, to mention only two problem areas that can impinge on information access. This thesis, *inter alia*, aims at determining whether similar problems exist in the context of the informal sector in Uganda. To this end, an attempt has been made to describe factors that can inhibit information-seeking behaviour. The list is by no means exhaustive.

5.3.2 Information source characteristics

Various characteristics influence the choice of information sources. These include access, credibility, form, and ease with which to use information sources and channels of communication which have been found to be influential factors in information-seeking behaviour. A fundamental requirement for information seeking is the accessibility of an information source. Absence of an easily accessible source inhibits the information-

seeking process or may impose higher costs than the inquirer is willing and prepared to pay. Regarding credibility, Wilson (1997:561) is of the opinion that if a seeker of information discovers that an information source is unreliable in the quality and accuracy of the information delivered, he or she is likely to disregard that source as lacking in credibility. In communication, the channel is very important. It is said that the channel through which information is received is closely related to the source. For example, threatening messages given over mass media channels may simply be avoided whereas the same kind of messages given interpersonally may induce people to act. The proposition here is the need for suitable packaging of information. If information is forwarded in an unsuitable manner, it may be disregarded, or rejected altogether. Underscoring the importance of packaging information and writing from the South African context, Leach (1999:161) quotes several authors who have expressed their feelings on this subject. They (Rosenberg 1993; Correa 1995; Made 1995) raise the question of which format is best to use for providing information that is required by people in rural areas. Re-emphasising the same feelings, Sturges and Neill (1998) consider that the nature of packages into which information is placed is crucial in the provision of information services to the community. Mchombu (1992) stresses the importance of presentation, stating that relevant content must be supported by appropriate presentation if information products are to have a desired impact. Drawing from studies conducted earlier by Bettman and Kakkar, Wilson (1997:568) concludes that the strategies used to acquire information are strongly affected by the structure of the information presented. In discussing their results these authors point to the general principle that merely presenting information is not enough. Even if information is available, if it is not easily processed, consumers cannot use it. If certain methods of processing information are easier to carry out or more effective for presenting information than others, they should be used. The above findings make very important observations. Although these authors deal with information provision in different contexts, similarities can be identified with the informal sector in Uganda. First, they are writing in the context of rural communities, of which the informal sector is a part. Secondly, they are talking from an African context, while Uganda is an African country. This is an important point insofar as the entrepreneurs of the informal sector are

concerned. Since they work in trying surroundings, packaging of information is an important consideration if they are to benefit from it. In addition, effectiveness in the transfer of information from origin to use also requires 'packaging' by skilled communicators (Bowes, 1995:125).

5.3.3 Information-seeking and acquisition

Information-seeking methods and processes differ to some extent by individual traits. Differences emerge out of an individual's awareness, education level, nature of the information system available or used, proximity of the source, the importance that an individual attaches to the information requirement and the mode in which information is presented. Although they are critical, they are not uniform in every case. However, information seeking could be active or passive, consistent or something done occasionally. Circumstantial moments determine which kind of information seeking is meant.

Reviewing past research, Wilson (1997:562) finds patterns of information searching and acquisition. He identifies *passive attention* such as listening to the radio, or watching television programmes as ways of acquiring information that may take place without intentional information seeking. He also identifies *passive search*, i.e. a search that signifies those occasions when one type of search results in the acquisition of other information that is relevant to the individual. Other forms include the *active search* where an individual actively seeks out information and the an *on-going search* where an active search frame has already been established but the occasional continuing search is carried out to update or expand one's framework. This study also aims at finding whether the informal sector entrepreneurs have similar patterns of information searching.

Information searching is considered in the general theory of information-seeking behaviour called the *risk and reward* model. Digging the archives, Wilson (1997:562) reviews the work of Stigler who, writing many years ago, predicted that when choice alternatives are similar, search efforts might be reduced. It is yet to be confirmed whether

this could be true of the informal sector. However, this prediction is useful because it provides the framework for discussing the theory of the risk and reward model.

The risk and reward model has been tested in consumer research. Working to test *services marketing theory*, Murray's (1991:1) findings are in consonance with the assertion that where risks are high there are correspondingly high returns. He states that the greater the degree of perceived risk in a purchase context, the greater the consumer propensity to seek information about the product. Conceptualised as the likelihood of negative consequences (i.e. danger, loss, etc.), perceived risk represents uncertainty about loss or gain in a particular transaction. This model, though normally associated with issues of financial cost, predicts that in setting out to search for information, not only financial resources but also psychological resources are risked. Settle and Alreck in Wilson (1997:563), also working in the field of consumer research, analysed and enumerated the components of perceived risks in five areas: *performance risk*, *financial risk*, *physical risk*, *social risk* and *ego risk*. Murray (1991) suggests six components, adding *safety risks* and *time/convenience loss risks* to the above, while at the same time disregarding the physical risk. The underlying proposition here is that high risk is actually associated with high reward. Aaker, Batra, & Myers in (Wilson 1997) suggest that active search occurs when the risk or uncertainty associated with a product is high.

In applying consumer theory to the study of library use, Emery in van Lill (2000:45), concludes that library users have behavioural characteristics that are similar to those of consumers of material goods and that the findings of the market research studies may also be applicable to library users.

Furthermore, it has been found that personal convictions or beliefs regarding a problem in question influence information seeking and acquisition. For example, if an individual finds that he/she cannot proceed without information, more effort will be expended on information seeking. But if the contrary is true, the opposite will take effect. The influence of *social cognitive theory* is relevant here. This theory derives from the ideas of *stimulus response theory* whose central construct is *self-efficacy* (or sense of personal

mastery). Wilson (1997) reviews the work of Bandura who defines the concept of *self-efficacy* as a person's estimate that a given behaviour will lead to certain outcomes. He makes a clear link between *self-efficacy* and *coping strategies* stating that, "the strength of peoples' convictions in their own effectiveness is likely to affect whether they will even try to cope with given situations" Wilson (1997:563). His explanation suggests that feelings of self-efficacy will affect how long someone persists in an action and how much effort will be put into the action. He notes, however, that *efficacy expectations* can be based on four major sources of information, namely: performance accomplishments, vicarious experience, verbal persuasion and physiological states, especially emotional arousal. Does the informal sector fit in this theory? Perhaps yes, and perhaps not. It is an area that is under investigation in the study. At this point however, Wilson (1997:563) hypothesizes that an individual may be aware that use of an information source may produce useful information, but doubt his or her capacity properly to access the source, or properly to carry out a search. In such a case failure to use the source might occur. Considering the observed personal characteristics of informal sector entrepreneurs, including low levels of education, this kind of experience is important to bear in mind because it would be an appropriate way to plan how to provide information to these people.

5.3.4 The information seeking process

Mention has already been made about factors that can inhibit or encourage information seeking and acquisition. In this section, an attempt is made to examine how information is sought in an information source. An example from scholars in *educational psychology* is used to typify the search process in terms of locating information in text. Wilson (1997:564) quoting Armbruster and Armstrong, states that searching for information in the text involves four components namely; goal formation, text selection, information extraction and integration and evaluation. To be able to complete the acquisition process, an individual requires knowing the options available to him or her. This is because information can be acquired in any one of the four ways. The question to ask is, do the literate entrepreneurs in the informal sector acquire information as suggested by Wilson? Even before the answer can be found, the above example postulates two things. First, it is

based on a model of educated people. The assumption would be that since some of the entrepreneurs are literate, it might partly be applicable and partly not applicable to the informal sector. The obvious reason is that there are some entrepreneurs in the informal sector who are literate and others who are not. Secondly, it presumes that information seekers are equipped with information skills (Fairer-Wessels, 1990:361). Being equipped with information skills may not be true always for every literate person, including people in the informal sector. What is necessary at this stage is to recognise as important the fact that a certain level of literacy influences the information acquisition process. Literacy level is important because it refers not only to one's ability to read, write and count, but also to one's ability to obtain information from literature (information literacy) (Chifwepa, 1997:128). Ellis's (1989) behavioural analysis of information seeking fits into this framework as it expounds the aspect of information extraction and integration phases in question.

Leaving in-text information acquisition aside, and knowing just how heterogeneous the informal sector is, information acquisition is bound to take into account many scenarios. Kaniki (1994:13) for instance, contributes ideas on ways in which people in Kwa-Ngwanase (Natal) and Qumbu (Transkei) of South Africa acquire and satisfy their information needs. He says that communicating with friends, relatives or neighbours, listening to radio, chatting after church service, receiving advice from a clinic or medical centre, are some of the ways in which people satisfy their information needs. Fairer-Wessels (1990:362) reports findings along the same lines and within the same country and come to the familiar conclusion that people (literate and illiterate alike) first consult family and friends (personal information sources) for advice by word-of-mouth to be used in coping with daily problems by word-of-mouth. It is only after this oral communication that the literate person resorts to outside professional and/or printed sources as indicated by Wilson above. In contrast, the illiterate person does not have the option of resorting to information in written form to satisfy needs, and is often unaware of their existence. In a Kenyan study of media accessibility and utilization by rural women, it is reported that talking to friends, professionals, relatives and using modern media were the most prominent means of acquiring information (Ngimwa, Ocholla, &

Ojiambo 1997:53). Leach (1999:162-3) reviews more literature on media from different parts of Africa. He cites Camble (1994) on the information environment and specifically communication media used in disseminating information on rural development by workers in a Nigerian state. Findings indicate that personal contact is the medium most used in disseminating information, followed by village meetings and town criers. In Malawian villages, Sturges and Chimseu (1996) are quoted to have found word of mouth communication as the most effective and useful means available. Aboyade (1984), in another Nigerian study with a slant to the communication potentials of a library in a predominantly illiterate rural Nigerian village, described audio (tapes), visual (posters), and oral methods of information provision as appropriate. In Mali, Diakite (1995) outlines the "Rural Audio libraries" as a method of distributing information to people in villages. In Zimbabwe, Maveneka (1991) is quoted for having found both audiotapes and radio being used for providing information to "Radio Listener Clubs" formed by women in Zimbabwe. In the same country, Katere (1995) describes use of "community theatre" and in South Africa, Wakelin and Simelane (1995) describe a Rural Consultative Forum in which Radio Zulu is used to provide information on development issues to people living in rural KwaZulu Natal. In the Rural Television Network (RTV), initiative videos (advertisements, movies and the odd public service programme) targeted at rural adults are shown on television screens located in trading stores in KwaZulu-Natal and other areas (Burton, 1994). In a study of information accessibility to micro and small enterprises conducted in Uganda during 1998, it is found that communicating by word of mouth, listening to radio and watching television, reading newspapers and newsletters, consulting business associations and NGOs, participating in exhibitions, seeking information from educational institutions and fellow business people were major means of acquiring information (MSEPU/IDRC, 1998:20). These findings are important to this study because they provide an understanding of the nature of information acquisition in specific environments. All the aforementioned findings set the stage for discovering whether or not the informal sector also uses the same channels and processes in information acquisition.

5.3.5 Preferred information sources and channels

Individual characteristics, availability of information sources, work environment, task attributes and ease of access to information have been found to have an influence on the type of sources and channels used obtaining information. The dynamics of information demand and supply will therefore keep shifting in relation to those attributes.

Informal networks have been found to be efficient in creating a social pool of knowledge that the prospective user can tap. Networks are a dynamic link between innovation and the market. In effect, networks help to create a large reservoir brimful of information (Bowes, 1993:124). Informal communications hinge on relatively loose, implicit interrelationships, which are essential to the process of creating demand. They facilitate interaction and information flow, and foster private and social contacts – contacts that often go beyond those that involve information. In addition, ideally the network's pool of knowledge is accessible to every user, and allows them to exploit economies of scale as they generate, communicate and experience information.

Dalton (1989-90:33) states that business information is generated by a variety of sources ranging from a formal channel of communication such as the library to an informal "live" network of personal contact. He lists selectively some of the business information sources as being personal contact (among established entrepreneurs and friends); the business luncheon; the telephone; newspapers; printed sources; mass media (radio and television); solicitors; advisory services; commercial sector (banks, chamber of commerce, commercial information services); resources of research institutes; university library; community information service, and the public library. Dalton reports an earlier study by Bennet (1984) on the use of information by small businesses in England, in which it is stated that, of that impressive list of information sources available to the small business owner, less than 25% of businessmen used the public library in connection with business information needs. This is a serious revelation because a public library is free and without discrimination and it is a centralised information centre in a community. At the beginning of this study it was highlighted that a public library could be a probable place for the informal sector to get information. It was therefore important to see if this is true of the

Informal Sector in Uganda as well.

Reporting on the knowledge behaviour gap in the use of health information, Sligo and Jameson (2000:864) find that community activities as suggested by Gaziano (1997:248), are often a source of information. Cultural meetings were found to be appropriate venues for transmitting medical information. Church networks were also found to be good conduits of information dissemination. Using literature derived from empirical studies, Fairer-Wessels (1990:365) expresses similar views, stating that for the black South African woman, personal information sources such as local social community networks in the neighbourhood, together with community-oriented organisations such as churches, women's groups and burial societies were important sources of information. These findings are important to the present study because the informal sector operates at a level that is close to a cultural environment and it is therefore possible that cultural activities and faith institutions are used for information acquisition.

In addition to this, there is ample evidence in literature that suggests the importance of informal personal networks. Informal personal networks are said to be good avenues for 'keeping in touch', that is, encounters and meetings, phoning around, scanning a few selected newspapers and journals have been found to be preferred in accessing information (McPherson, 1995:111). The informal sector is part of a wider communication network within the country and use of informal personal networks may therefore be widespread. This study attempts to find out if such networks also apply to the informal sector.

In the study of media accessibility and utilisation by Kenyan rural women, Ngimwa, *et al* (1997:55) find that women commonly rely on the radio, extension workers, interpersonal communication, the church, and posters/ charts for information. This study also aims at finding whether women in the informal sector in Uganda use the same sources of information or not.

As stated in earlier, the micro and small enterprises in Uganda prefer accessing

information personally by word of mouth, through local councils, the radio and Television, newspapers and newsletters, business associations and NGOs, exhibitions, educational institutions, fellow business people, signposts, and business promotion centres (MSEPU/IDRC, 1998:20).

5.3.5.1 The emerging models

In addition to the above-mentioned sources of information, there are emerging models that are showing promise in information transfer. These recent business innovations show varying degrees of promise in serving Micro and Small Enterprises (MSEs) and low-income customers in developing country environments with reliable and affordable ICT services. These models include: -

5.3.5.1.1 Phone shops

In a number of countries there has been a rapid growth of phone shop franchises that provide public phone and fax services to the regions that previously lacked basic telephone access. The entrepreneur's own business contacts and personal networks may serve as adequate channels for obtaining relevant business information (Barton and Bear 1999: 9). These same people have also found, through desk study, anecdotal evidence which suggests that new communication and information technologies are beginning to offer MSEs a range of new and exciting development opportunities. They report four business models that show promise, namely phone shops, multi purpose community telecentres, postal services, and business information and communication centres that have grown substantially in a number of countries. These shops provide public phone and fax services to regions that formerly lacked basic telephone access. India for example, operates more than 10,000 telephone shops called *teleports*, located in small and rural areas. In Senegal, the national telecommunication operators, *Sonatel* has franchised over 1000 phone shops or telecenters. In South Africa, *Vodacom*, a supplier of cellular phone services has developed over 375 phone spazas. Indonesia is another country that has rapidly developed rural telecommunication kwon, known locally as *Waring telecommunication or *Wartels*. In Bangladesh, the Grameen Bang has set up *Grameen Telecom* as a means of bringing the information revolution to the Bangladeshi through

village pay phone (vpp) service. In the Philippines, *Bayan Tel* offers storefront public calling offices. In Uganda, companies like MTN and Celtel have cellular telephone services, and Uganda Telecom, operating under the name, *Mango* have established phoning kiosks (free-standing phone booths) and phones fixed to walls or pillars of buildings) as well as mobile phone systems throughout the country.

5.3.5.1.2 Multipurpose community telecenters

Community based telecenters have been set up in recent years by governments, community groups and private sector organisations to provide information technology and telecommunication facilities as well as user support and training for members of a community (usually remote and isolated). Telecenters initiatives have been implemented in a variety of countries, beginning initially in the Scandinavian countries and spreading from there to Scotland, Wales, Canada, Australia, and Brazil. A variety of different organisational forms have evolved, called by different names, including Telecottages, Telecenters, multipurpose community telecenters (MCTS), community information centres and teleports. Most of them have been developed to serve specialised needs in particular countries. For example, in the Scandinavian countries as well as in Scotland and Wales, telecenters have been developed mainly to promote telework in remote areas. In the United States, telecenters have been developed mainly to support telecommuters with the aim of reducing commuting time and highway congestion.

In developing countries, however, the principle focus of multi-purpose community centres has been to provide rural or poor communities with access to the benefits of new information and communication technologies through shared facilities. Telecentres provide the basic set of telecommunication services for micro and small enterprises. Telecenters could potentially also offer E-mail services, computer training, internet-based information services, support to help develop E-commerce initiatives and access to distance education / training and advisory services (Barton and Bear 1999:19). In Uganda, at least more than four telecentres have been established to promote information access in the rural communities. Doctors in regular consultation with the National

Referral Hospital, Mulago Hospital, also offer Telemedicine. The same kinds of facilities are being used for a pilot project for teaching in primary schools.

5.3.5.1.3 Emerging Postal Centre models.

A reliable postal service is another core service that micro and small enterprises need in order to carry out their business efficiently. Firms, large and small, need to be able to send and receive mail, small packages, business documents, publications and promotional materials. Unreliable postal service constrains the growth of business enterprises just as the lack of access to telecommunication facilities, efficient transportation facilities or any other means of communication does.

Over the past decade, development has promoted a rethinking of how postal service can be provided more efficiently. The expansion of private package delivery and express mail service (FedEx, DHL, TNT) has provided business and household customers in many countries, including Uganda, with alternatives to their postal systems for these types of services. Uganda has taken this advantage from its liberalised economy. The government of Uganda created the foundation for this through putting in place a law that liberalises the communication sector. It created the Uganda Communication Commission to ensure the development and regulation of the telecommunication sector in the country.

5.3.5.1.4 Business Information Communication Centres

In areas where the information and telecommunications infrastructure is better developed or in which demand from specialised client groups is already strong, it may be possible to operate more specialised information and telecommunication centres than have been developed in a number of countries in recent years. Two categories of business centres are considered here. One category includes facilities-based centres that provide information and communications, along with other business services, to clients from small and medium-sized firms. A second category includes a number of virtual centres or resource networks (Barton and Bear, 1999:25). Services offered by business information communication centres include: phone services, fax services, e-mail, business registration, market and supplier information, access to publications, training materials

and specialised databases, postal facilities, photocopying and binding services, access to computers and printers, and secretarial and translation services. In some cases they might offer temporary office facilities, warehouse facilities, meeting rooms or conference facilities, legal services, referral services to other service providers such as bookkeeping.

Dervin & Nilan (1986), some time ago, undertook a study which showed that information sources are differentially used according to work setting, task, experience, seniority, educational level, professional activity, and professional orientation. This is a composite summary. The main question therefore is, could these be the sources and channels that the informal sector uses? This is what the study attempts to establish.

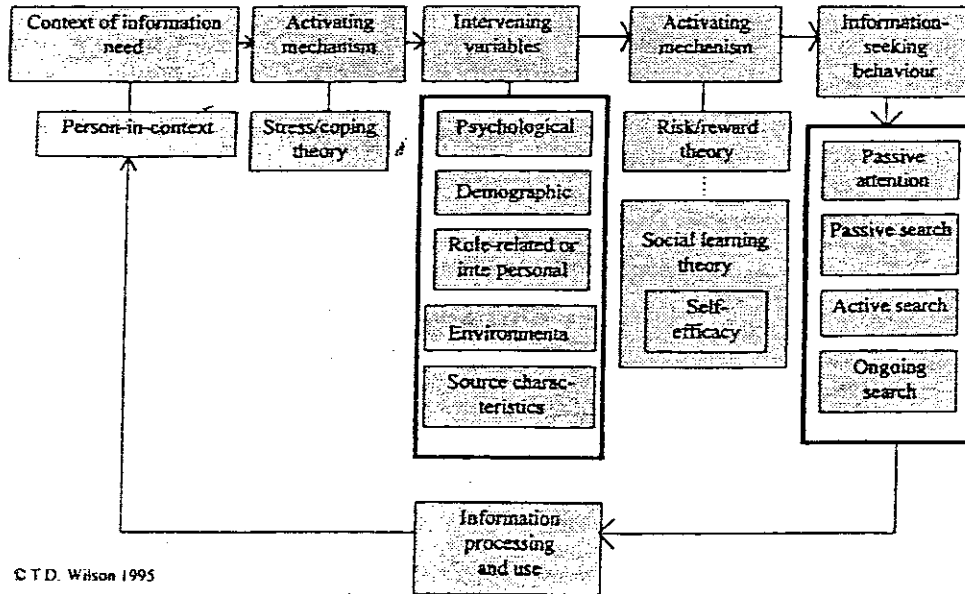
From what is discussed above, information use involves human motivation entirely. The medium of communication has a profound effect on the use made of information. Information seeking appears to be similar in all parts of the world, and includes problem solving, decision-making or the answering of questions. It is only contexts that differ. Individual attributes, work attributes, and the environment influence greatly any process of information access and use.

5.4 The model of information behaviour

This section presents a model of an information activity. For this purpose, Wilson's (1997:568-569) that provides a framework for studying information behaviour in general is used. An update of the 1981 model depicts the relationship between information needs, information seeking, and information use. It considers various aspects of information behaviour in order to establish whether there are any similarities with the informal sector.

In this model all concepts (internal and external), that is, the concepts of information need, information seeking, and information use is brought together. Elements considered in it correspond with those in the conceptual framework of the study. The model illustrates the behaviour of an individual faced with the need to find information. In this model Wilson advances circumstances that give rise to information-seeking behaviour. The main elements are the situation within which the need for information arises, or is

experienced (i.e. the PERSON performing a ROLE in an ENVIRONMENT), the barriers that may exist to either engaging in information-seeking behaviour or in completing a search for information successfully, and the information seeking behaviour itself. The model is a result of the transformation from user modelling and the system-driven paradigms into the cognitive paradigm.



5.2
Fig. 5.2 A revised general model of information behaviour.

Source: *Journal of Information processing & management* vol.33, No.4.

In the model, information need is defined in the personal context. Need is triggered by an activating mechanism which, in turn, depends on the intervening variables in an individual or about the external environment. Everything being constant, the activating mechanism again comes into play because need for information is pressing and this leads to behaviour of information-seeking.

5.5 Information uses

A decade ago, Hewins (1990:165) expressed a feeling that, “if we”, and it is presumed, the “we” means the information scientists, accept the premise of Belkin’s ASK model and Dervin’s “sense-making” approach that users have a gap in their knowledge and seek information to bridge that gap, then it is essential that information need be tied to

information use. The user's need, she argues, is situation specific and changes as the situation changes.

Westbrook van Lill (2000:42) writes that need is the basis of information use... needing is the only prerequisite, because it is the possession of a need that defines a user. It is now widely known that information use is a constructive process. Information provided for an information need is used. This is the theoretical base of the matter. Used in the context of the small business sector, Dalton illustrates the importance of information use by giving a South African example of a successful business, *Pick 'n Pay*, that started as a family grocery store business in Mowbray in the 1950s but stands today as an industrial giant. He argues that such economic progress is made possible when vigorous and intelligent use is made of all the business information available – both information for business and information about business. This means that it is the small business owner's responsibility to exploit opportunities and promote productivity by means of timely access to relevant, reliable and accurate information at reasonable cost and with minimum effort.

Information use is the conceptual terminal activity in the process of information seeking before the schema is repeated, and perhaps several times in one day. It is a means to an end but not an end by itself. Satisfaction of the information need implies achievement or gratification on the part of the individual who seeks information. To demonstrate how this happens, a theoretical journey is described. It starts when the person solving the problem is confronted with a problem, which is unorganized but contains ideas of what this person wants. Through interaction with an information system, the person progresses to a conjecture or tentative theory about the problem solution, then tries to eliminate errors in it, before finally arriving at a problem state (Cole & Mandelblatt, 2000:1035). The state is defined and focused. The information source is selected. Information is extracted, assimilated, repackaged and then used if found suitable. However, the normal does not always happen as expected, that is, information so acquired will serve its purpose. Information could be conceived well but in application the person solving the problem could err or the information could turn out to be only partially useful. When this

happens, the information-seeking schema repeats itself until the problem is solved, if so desired. The 'if so desired' context is emphasized here because there are possibilities of an information seeker becoming frustrated and the search being discontinued. Many factors have been found to exact an information seeker's behaviour to act this way. For example, the importance of satisfying a need, the penalty incurred by acting in the absence of full information, the cost of using information, prejudices, and the loss of time. If all these, or any of them, appeal more in the mind of the information seeker, the net result will probably be taking decisions with incomplete information. It is the view that whatever the source of information may be, it will at some point be used. But to what uses? This is where the work of Taylor (1991:228) and those before him on this subject are relevant. All of them have gone to the extent of defining uses to which information is put to. Taylor particularly raises some valid questions, asking what constitutes, for a given set of people, the resolution of a typical problem? What kinds of information (amount, degree of relevance, quality, format, etc.) do people in a particular set anticipate? What filtering mechanisms exist? What are the attitudes towards the benefits and costs of information use? At the risk of premature classification, they tentatively set up eight classes of information use. These are: (1) *Enlightenment*: the desire for context information or ideas in order to make sense of a situation. (2) *Problem understanding*: more specific than enlightenment; better comprehension of particular problems. (3) *Instrumental*: finding out what to do and how to do something; instructions; under certain conditions, instrumental information needs will define the need for other types of information. (4) *Factual*: the need for and consequent provision of precise data. They cite two constraints to factual data: (a) the actual quality of data, how well do they represent reality, and (b) user perception of quality. In this regard, they argue experientially that people tend to accept data and information without being critical about its quality. (5) *Confirmational*: the need to verify a piece of information; need to seek second or even third opinion; (6) *Projective*: future oriented, but not related to political or personal situation. It is concerned with estimates and probabilities; (7) *Motivational*: has to do with personal involvement, of going on (or not going on). In Dervin's terms: "got started", "got motivated", "kept going"; and (8) *Personal or Political*: has to do with relationships, status, reputation, personal fulfilment. In Dervin's terms: "Got control",

“Things got calmer, easier”, “Got out of a bad situation”; “Avoided a bad situation”; “Relaxed, rested”; “Got pleasure ”etc. (Dervin 1982:229-230). These findings strongly suggests a need to differentiate to what uses (or non-use) exactly do different target groups in the informal sector put information to and how is it used. This is a legitimate proposition.

Hewins (1990:161) reviews the work of Harkin & Petty on information utility and the multiple source effect. She concludes that information processing is enhanced when same information comes from multiple, reliable sources. Information from multiple sources represents independent and divergent pools of knowledge and is therefore more worth of attention and processing. The implication again is the reliability and validity of the information source.

To elaborate on information use, the Saracevic and Kantor model is used. This model decomposes the cycle of information use into three phases. (1) Acquisition i.e. when information is acquired. (2) Cognition i.e. the process by which the information user understands or integrates the information that has been obtained. And (3) application that is when the information obtained is applied to a use (Saracevic & Kantor, 1997:533-535, 541).

It is known that information is mostly used when solving problems, that is, used in any situation calling for action. Information could be in someone’s mind as a result of experience, training or obtained externally from some information system. Information obtained outside and in conjunction with an existing problem may be complementary to an existing internal knowledge base, whose contents and structure play an important role in securing the right answer and the right use of new information (Menou, 1998:11). But that is not all. To find out if use made of such information was or was not satisfactory, an assessment of its value and impact is important. Information impact indicators should be used, if there are any. However, the value and impact of information can be measured in the first place from how it addresses the more immediate and practical need. The value of information lies in the context to which it is structured and organised.

Value and impact are themselves subject to different interpretations. Sticking to the familiar mechanical definition as Menou relates, that is, the material effect of a shock, misdirects understanding to wrong conclusions. Value and impact of information use means the new conditions that are established after information has been used. They are the changes resulting from the outcomes of having used information. Putting this in context, Menou (1998:11) uses a metaphor of a fisherman. He narrates a story of someone that was shown how to catch a fish and was lucky enough to catch it. By catching a fish the first time does not in itself prove much about the value or impact of his knowledge of fishing. But that this person knows from now on how to catch fish does. Using the same analogy to an information user, by the very fact that someone was shown where information is and he/she was lucky to get it, does not prove much about his knowledge of information seeking. It could have been mere luck or securing of information by serendipity. But that this person from now on is capable and able to access and use it productively, the information he/she gets is a clear proof of the value and impact of information to the individual. By "Impact" is meant the changes that take place in an individual as brought by the use of information in the ability of people to satisfy their needs". This is by and large an enhanced state of knowledge. Knack (1994:11) suggested that the best way to assess the ultimate value of an information system and the information it provides is by measuring the uses made of information and the subsequent impact of that information on the user's scientific and technical activities. In this way, he felt that information needs will manifest themselves in the form of tasks of users or potential users. Fairer-Wessels (1990:362) establishes that level of education and specifically higher education, greater variety of information, lifestyle – such as income, and occupation information use are positively related to active information usage. Exclusive usage of either informal personal sources of information such as family and friends, or audio-visual mass media, such as the commercial television, is negatively related to informedness and the acceptance of innovation. While discussing information use in enterprises in developing countries, Rui's (1997:223) view is that effective absorption and use of information depends on effective information resource management and information services. According to Ouma-Onyango (1997:52), information resource management links managerial effectiveness, information acquisition

and use. It represents a synthesis of a range of ideas based on the premise that effective decision-making and strategic thinking cannot be divorced from information considerations. Furthermore, in a study to find out whether information and communication technologies are viable businesses to micro and small enterprises, Barton and Bear (1999:8) cited some of the factors that affect the communication and information uses. These are the operating requirements of the line of business in which MSEs are engaged; the sales and logistical requirements of different types of markets in which MSEs might be involved (local, urban, business to business); and location or geographical factors (that is, the physical location of firms vis a vis their customers suppliers, and support networks).

It can be concluded that information use is associated with traits, that is, individual and informational traits. It is further influenced by the peculiarities of specific subject fields and by the approach to information generally followed by its practitioners. Information traits include: (1) *Quantitative continuum*: from quantitative data (phenomena that can be measured and represented numerically) to qualitative (descriptive). (2) *Data continuum*: from hard data (empirically derived and replicable). (3) *Temporal continuum*: ranging from historical or precedence to focusing and future modelling. (4) *Solution continuum*: ranging from single solution criteria to a range of options among which the receiver can choose on the basis of some internal, possibly inarticulate criteria or intuitions. (5) *Focus continuum*: from factual information of well understood problems to diffuse information of idea generation and brainstorming. (6) *Specificity of use continuum*: ranging from applied (instrumental, immediately useful) to substantive (descriptive, know-what) too theoretical (explains and predicts why something works as it does). (7) *Aggregation continuum*: ranging from clinical information to census or aggregated information derived from large populations; and (8) *Causal/diagnostic continuum*: causal information discusses why something happens; diagnostic describes what is happening (Macmillan & Taylor in Taylor (1991:231). It is with reference to these differences that Narayana (1991:113-4), argues that information, its supply and modes of utilisation, differ from field to field, and from person to person.

5.6 Summary

In this chapter, an attempt has been made to filter ideas, opinions, theories and models of different people on information needs, information seeking and information use. This synthesis will form a basis for establishing any relationships and contradictions that may exist within the Informal Sector in Uganda. In doing so, the study strives to accumulate substantial evidence for developing a hypothesis (es) which, it is hoped, may offer a contribution to knowledge.

The review comes to the following conclusions.

- People seek information because they experience information gaps in their minds. Gaps exist, as information needs.
- Information is desired for its relevance to the information need.
- People sometimes experience difficulties in seeking for information. Some of these difficulties are internal to the person, while the environment in which the affected person is operating imposes others.
- Information can be located in a number of sources, including the mind of an individual. Type of work, discipline, available facilities, motivation and stress influence information needs.
- Personal factors influence information-seeking behaviour.
- There are barriers to information seeking.
- Factors such as accessibility, credibility of sources, format of presenting information, literacy levels, information skills, methods and channels of acquiring information influence information-seeking behaviour.
- Information seeking methods and processes are unique to every individual.
- Word of mouth is the most common method of information sharing.
- Personal contact is an important way of getting information.
- Information is used to satisfy information need. Utility (value and impact) of information is as important as acquiring it because information is used to build a bridge across a need gap.
- The study of information needs, information seeking behaviour and information use is a study of the human mind in information activity mode. It is a study of information

user behaviour. Understanding information behaviour is one of the most fundamental factors in planning information services.

CHAPTER SIX

RESEARCH DESIGN AND METHODOLOGY

6.1 Introduction

Research, according to Peritz in Rochester and Vakkari (1998:167), is an inquiry where the goal is to elicit, by means of a systematic method, new facts, concepts or ideas. It involves a sound frame of reference, exact problem formulation, and connection to earlier research (Rochester & Vakkari, 1998:167). The research design and methodology is the philosophy of a research process. This philosophy, as observed by Bailey (1987:33), includes firstly, the assumptions and values that serve as the rationale of a study and, secondly, the standards the study uses for interpreting data and reading the conclusions. A research method is understood as a first step in the way and the means by which a research project is implemented. For example, this study used multiple methods that include the historical, survey and the critical-incident methods, together with conceptualisation and observation. Closely related to research method is research design, which is the theoretical perspective that specifies how a study is executed in such a way that it answers the research questions. A research design, therefore, is the structure of research that describes what to do, and how to do it. Kothari (1985:1) describes it as a voyage of discovery that entails following a well-laid plan to steer correctly on course. It is a strategic framework for action that serves as a bridge between research questions and the execution or implementation of the research (Durrheim, 1999:29). It involves the structuring of variables in a manner that enables their relations to be determined (Nkpa, 1997:40). The design requires a formal and even rigid adherence to a defined system of inquiry to find out unknown facts or to collate old ones in a new way. Its overall purpose is to extend and accumulate knowledge.

A research technique, on the other hand, is the approach or strategy by which research is carried out. For example, research can be carried out by observing the phenomena taking place or by behaving in a particular way. It may be implemented by interview via telephone or face to face; it may involve document review or subjecting the existing information to a process of content analysis.

A research plan is the blueprint, or outline of a research project. In a plan, its components are described systematically and in a methodically manner, so that during implementation the plan is merely followed as laid out. The purpose of this chapter, therefore, is to describe how the research design and methodology was applied to the study. It includes the following elements: the study design, the study area, the research methods, the study population, the sampling technique and the research instruments. The data collection techniques, the procedure for data collection, methods of data analysis and interpretation are also represented. The problems that were encountered during the study are highlighted.

6.2 The study design

The epistemological arguments concerning the most appropriate way in which to conduct research on human subjects is reflected by various researchers such as Vulliany (1990) and May (1993). Both argue that there are many approaches to social research and these depend on the nature, aims and objectives of a study. The study at hand is descriptive, and therefore qualitative in nature. Filstead in Weingand (1993:19) argues in favour of a qualitative methodology by pointing out that this method has had its greatest success in formulating a position that recognises the importance of two perspectives of human behaviour, namely its external and internal components. This author contends that while quantitative research has the ability to address external behaviour, it is silent when the internal behaviour is the object of analysis. She concludes that the internal, or inner, perspective emphasises the importance of mental and social processes in the context of participation in an activity. This study was interested in both the external and internal aspects, i.e. the individual and his environment. Moreover, qualitative research attempts to explain and generalise matters, which quantitative research does not do. It seeks in-depth information and can be used to uncover and to understand what lies behind any phenomenon about which little is known (Strauss & Corbin, 1990:19). Its other advantage is its ability to handle large amounts of data which, through repeated sampling, can then be generalised to represent the total population. Reinforcing the ideas from those writers, Weingand (1993:19) argues that in seeking solutions to problems, qualitative methodology allows the researcher to "get close to the data." In this way it develops the

analytical, conceptual, and categorical components of explanation from the data itself – rather than from the preconceived, rigidly structured, highly quantified techniques that confine the empirical social world from the perspective of subjects of investigation. The author, nevertheless, recognizes that qualitative research can be utilized in conjunction with quantitative methods.

The choice of qualitative design and method was based on the fact that the study had no predetermined hypothesis to test. It was therefore found suitable for exploring human behaviour in relation to information needs and information seeking. The qualitative approach also provides for a broader understanding of a phenomenon by focusing on unique cases, while at the same time taking into account all the themes involved. This approach is also inductive in the sense that abstract constructs, such as hypotheses, models, and theories are developed during the study but not predicted earlier. Instead the study had research questions that sought answers to the research problem. Preferring research questions to a hypothesis is the most natural way of allowing a theory to evolve gradually from the data itself. This approach is compatible with the *grounded theory* that is inductively derived from the study of the phenomenon that it represents (Strauss & Corbin, 1990:23). The theory rests on the methods that take the researcher into and close to the real world of study (Patton, 1990:66). The study of information needs and information seeking behaviour, like many other social phenomena, is one such complex area of study that requires a conceptually dense theory that is capable of accounting for a great variation in the phenomena studied, which in this case is the informal sector.

The informal sector lends itself to such a theory, as it is highly heterogeneous, given the non-homogenous characteristics of entrepreneurs in many fields of enterprise. It would be very difficult to study the complexity of this sector without the aid of a dense theory, such as offered by the grounded theory. The combination of the complexities of both attributes, that is, information seeking and informal sector heterogeneity, suggested the use of a qualitative approach that permitted an in-depth exploration of issues on a relatively small sample. For example, previous researchers such as Ellis (1987) employed the grounded theory technique in the study of the information seeking behaviour of

academic social scientists. Brown (1990) used it in the study of information, communication and organisational culture, while Soto (1992) used it in the study of the information-seeking behaviour of dental professionals. This study, likewise, falls within the scope of information user studies, which is appropriately suited to the use of the grounded theory. Thus, qualitative inquiry allows new sampling strategies to suit unforeseen opportunities and circumstances encountered in fieldwork (Slater, 1990:179).

However, the quantitative approach was also employed to reinforce the analytic thrust and theoretical foundations of the study. It was chosen in spite of the warning by Goode and Hart in Hakim (1987:27) of the false dichotomy of separating qualitative and quantitative studies, or statistical and non-statistical approach. The authors argue that the difference between them is "ideal-type." When a study is conducted, usually a combination of both qualitative and quantitative aspects is usually used. This occurs because there is likely to be aspects of both in the study that lend themselves better to descriptive presentation than would be the case in a statistical format. On the other hand, the study could also yield aspects that are better suited to a statistical representation.

In bringing both aspects to this study, it was expected that in the main interview schedule there would be aspects of a demographic nature concerning the informal sector that would require quantitative data, as well as aspects that required qualitative data. For example, open-ended questions dealt with qualitative aspects of the schedule while closed-ended questions and statements cover the quantitative aspects that are statistically quantifiable.

6.2.1 The Research methods

The historical survey, observation and the critical-incident and conceptual methods were chosen for this study. The study was largely based on a qualitative research design and methods.

6.2.1.1 The Historical method

History is an account of certain past events while historical research is a method of

discovering what happened in the past, from records and other accounts (Marshall & Rossmann, 1995:89). According to Bailey (1994:316), historical research tends to be qualitative and serves as an effective complement generalized scientific research by documenting a unique historical event.

Primary data was obtained from oral testimonies of witnesses, from documents, and relics. Oral testimonies are defined as statements that are spoken, sung (Vansina, 1985: 27). Secondary data, according to the same author, include written accounts in books and manuscripts, contemporary records, archives and newspaper reports.

As the informal sector is an age-old economic institution dating to pre-historic times, the documentary sources were reviewed to build up information about the history of the sector in Uganda. This formed the content of chapter two of this study. Books and records on ethnographic studies and development reports as well as plans in Uganda were reviewed. In doing this, the historical research tradition was kept in mind, that is, verifying the accuracy of statements about the past in order to establish relationships and to determine the cause-effect relationship of the people and the sector. For this purpose, an intensive literature review was conducted.

Literature review was used for establishing background information prior to interviewing and observation. According to Leedy (1985:69), reviewing literature has the following purposes:

- literature of similar investigations helps to show how identical situations were handled.
- through literature, methods and techniques of handling problematic situations are revealed.
- through literature review, sources of data, their advantages and disadvantages, are revealed.
- it introduces the researcher to significant research personalities in the field of study.
- through literature survey, the study may be seen in the historical and associative perspective, but also in relation to earlier and more primitive attacks to the problem.

- documents provide the researcher with new ideas and approaches.

The method is useful in assisting the researcher to evaluate his/her efforts by comparing them to related efforts of others.

6.2.1.2 Survey method

The survey research is a method of collecting data in which a specifically defined group of individuals are asked to answer a number of identical questions. The answers form the data set of the study (Baker, 1994:172). Its primary function is to collect information that can be analysed to produce conclusions. This method enables the study to describe what is going on in the research setting, to obtain relevant facts about the activity going on in the setting, and to be able to state those activities, or facts quantitatively. The survey identifies the problems and explains the cause-effect of what takes place in the research site. When using this method, questions are put to a sample of respondents directly. In this way, information is gathered from the small population to obtain empirical knowledge of a contemporary nature (Busha & Harter, 1980:54). More than this, the method allows for the collection of background information and hard-to-find data (Busha & Harter, 1980:62). This knowledge allows generalisations to be made about the characteristics, opinions, beliefs, and attitudes of the entire population being studied. Sproull (1995:30) also recommends the survey method as being appropriate especially when attitudes, ideas, comments and public opinion on existing problems or issues are being studied. Besides, it is a method that has been found to save time and money without sacrificing efficiency, accuracy, and information adequacy in the research process. This method was implemented, largely, through the critical incidence technique that involved interviews.

6.2.1.3 The Critical Incident method

The critical incident method is a job analysis method that has been used in the study of information needs for close to fifty years. The method was originally developed during World War 2 as a way to identify effective and ineffective behaviours in a variety of military activities. Subsequently it was developed as a tool for the systematic study of human behaviour and labelled *Critical Incident Technique* (Fisher & Oulton, 1999).

According to Flanagan in Fisher & Oulton (1999), it is a term used to describe a flexible set of principles for qualitative research but consisting of a set of rules governing data collection. Information about this method first appeared when John Flanagan described it in 1954. It is a method that involves the collection of anecdotal descriptions of effective and ineffective job behaviours which job incumbents, supervisors, and others observe in a work setting. The anecdotes, called "critical incidents" are specific behaviours, which exemplify success, or failure in some aspect of the job being analysed (Corsisni 1984:317). However, it was Allen's (1966) use of the critical incident method (which refers to resolving problems in a particular critical incident) that was the "first" in innovative methods for data collection (Hewins 1990:148). During that time, Allen used the "solution development record", which is a variation of the critical-incident method, to gather data about how technologists use information. To this day the method remains a very effective method for assessing information needs and use and has been used as the basis of other innovative methods. For example, the National Library of Medicine (USA) conducted a study using the critical-incident technique to evaluate the MEDLINE database in terms of its impact on users Wilson *et al* in Hewins (1990:151). Kaniki, (1994) has applied it in the study of information needs of women in the Kwa-Ngwanase (Natal) and Qumbu (Transkei) communities in South Africa. Ngimwa, Ocholla & Ojiambo (1997:45-66) applied the critical incident method while researching media accessibility and utilisation by Kenyan rural women. They contended that this method was appropriate because it is based on the theory that people have fewer difficulties in remembering or recalling accurately events taking place in their lives. Therefore, this made it possible to probe deeper into the subject until relevant information could be obtained. Fisher & Oulton (1999) have used this method in library and information management research. More researchers and scholars have applied it elsewhere. For example, Wilkins and Leckie (1997) used it to study *university professional and managerial staff: information needs and seeking*; Radford (1996) published an article in the Library Quarterly titled *Communication theory applied to the reference encounter: an analysis of critical incidents*. Strauss and Corbin (1990) also used it in when writing their book, *Basics of qualitative research: grounded theory procedures and practices*, while Peam and Kandola (1993) used the method in their book: *Job analysis: a manager's*

guide. But what is important to note about it is that the critical-incident method tends to be quite effective because it relates the uses of sources to a given problem. It is inherently tied to the decision-making process in a specific situation and defines the criteria used in source selection and system performance. It is a method that can be used in an observational mode as well (Hewins, 1990:163).

In applying the method to this study, the interview schedule for the entrepreneurs required them to be able to remember situations in which they required information, the types of information they wanted, how they obtained that information, sources of the information, constraints they faced in accessing the information etc. It required the representatives of the people in the organisations to remember what type of information entrepreneurs normally required from them, in what languages and formats the information was needed, and what to do if they did not have the required information. The critical incident method was used on the informants while seeking knowledge of the types of enterprises that are found in their areas. Also in answering various types of questions normally asked by the entrepreneurs; in considering the type of information and the formats in which information is given to entrepreneurs, and in giving details regarding access to and sources of information. All in all, the critical-incident method is about the ability to remember important incidents that have occurred and being able to articulate them as they happened exactly.

6.2.1.4 The Observation method

To begin with, science is empirical because it is based on the study of observed evidence (Baker 1994:41). This means that science, as an activity, is an advanced form of seeing. It is an effort to observe how the real world works. The primary task is careful observation. This means that the observation is carried out accurately and precisely. These are the bases of the observation method and because of its inherent principles, observation was found to be a method as well as a technique of research. As a method, it is based on the stated principles. And as a technique, it is about the strategy or tactic that is used to observe. Very often concepts like 'obtrusive or unobtrusive' observation techniques are used to describe the strategy employed in observing. In other instances, phrases such as

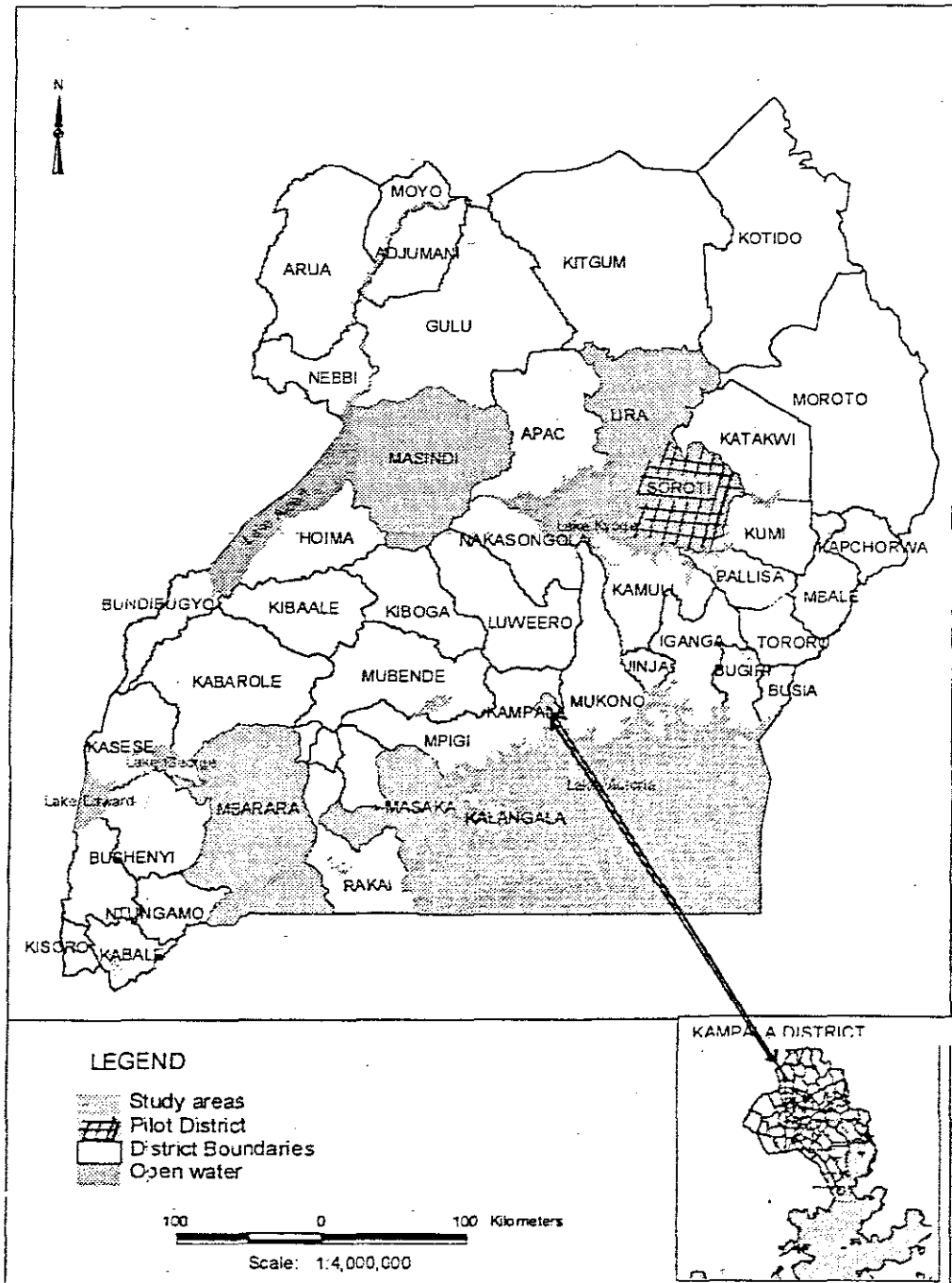
“observer as full participant”, or “partial participant”, “full observer” or “partial observer”, is applied. This signifies that there are many options within this type of data collection (Cresswell, 1994:150).

Observation as a method was used for this study. The purpose was to see the nature of the informal sector as it is on the ground so that its activities can be categorised and documented. And to implement it, the researcher opted and participated unobtrusively in the activities of the sector as they were going on and was able to observe the relevant situations necessary to answer the research questions. The incidents were recorded in a self-observation guide which was supplemented by photographs (see exhibits).

6.3 Study Areas

The study was carried out in six districts of Uganda. Of this six, one district, that is the Soroti District, was studied as a basis for testing and improving the research instruments, and for becoming familiar with the fieldwork. The other five districts, namely Kampala, Lira, Masaka, Masindi, and Mbarara were used for the main study. Each of these districts has urban and rural areas. The informal activities in both settings were studied. “Rural” in this context means any non-urban settlements including riparian villages found along the shores of lakes. The following MAP 2 shows areas where the study was conducted.

MAP OF UGANDA SHOWING STUDY AREAS



6.3.1. Lira District

This district occupies an area of 7,251 sq. km. It shares borders with the districts of Apac in the west, Soroti in the south-east, Kitgum in the north, Kotido and Moroto in the north-east, Katakwi in the east and Lake Kyoga in the south. The district was purposely selected to represent northern Uganda. Its population during the last census of 1991 was 500,965 people. The main language that is spoken in this district is Luo, which is also the language spoken by the majority of people in the northern Region of Uganda. Most people are engaged mainly in agriculture. Main industries include: oil extraction and grain milling, cotton ginning, and manufacture of furniture. Informal activities and small-scale industries are spread through the district with major concentrations in urban areas and along lake shores. The following areas were chosen for the study: Lira Town with four divisions, Adekokwok, Adwari, Orum, and Namasale. Namasale is a fishing area. (Location showed in map 2).

6.3.2 Kampala District

Kampala is both a district and the capital city of Uganda. It is located in the central region of Uganda and north of Lake Victoria. Being the capital of Uganda, it is the hub of political, government, commercial, industrial and transportation activities in the country. It covers an area of 176 sq. km and is surrounded by Mpigi district. This district was studied in order to reinforce findings from other districts.

According to the Kampala Urban Study (Nostrand Associates, 1994), the majority of people (80%) work in the informal sector (small-scale business, small-scale industries, urban agriculture etc.). The population of Kampala has grown from 333,700 in 1969 to 775,000 in 1999. The population of Kampala is expected to grow at the rate of 4.9% per annum between 1994-2004, resulting in an estimated population of 1.5 million in the year 2004. A large proportion of the growth rate is attributed to rural-urban migration. The population of Kampala accounts for 40% of the urban population of Uganda. Logically, it therefore means that it has the greatest concentration of the informal activities in the country. The average household size is 5 persons and per capita income is US \$250. The

divisions selected for the studies were Central, Nakawa, Kawempe and Rubaga. A division is an equivalent of a county in a rural setting.

6.3.3 Mbarara District

Mbarara District lies in the south-western part of Uganda bordering the United Republic of Tanzania to the south, the districts of Masaka and Rakai to the north-east, Bushenyi and Ntungamo to the west and Kabarole to the north. The district has a total geographical area of 7,346 sq. km. It has a total population of 1,012,400, of which 94.0% is rural based. In terms of social development, the indicators show that 53% of the population is literate with a life expectancy of 45 years. The study was conducted in the two rural sub-counties of Rwanyamahembe and Rugando, and the Kakoba division in Mbarara Municipality, Katete, Rwebikoona and the Ibanda Township. The purpose for conducting the study in rural and urban areas was because there were unique cases of respondents that were recommended by the Mbarara University of Science and Technology's Department of Medicine lecturers as having a great deal of information about orthopaedics and herbal remedies. These particular persons were found to be working closely with the University Hospital and at the time of interview, they had many patients. This district represented western Uganda in the study.

6.3.4 Masaka District

This district is found in central Uganda, tending towards the south. It borders with the districts of Mbarara in the west, Sembabule to the east and north-west, Mpigi in the north-east, Kalangala in the east, Mubende to the north, Rakai in the south and Lake Victoria (Nalubaale), also in the south. This district represented central Uganda in the study and was also purposely selected. The district occupies an area of 10,611sq. km. According to figures from the 1991 census, it had a population of 838,736 people. *Luganda* is the main language spoken in this district. Most people are engaged in agriculture, cattle ranching and fishing on Lake Victoria and Lake Nabugabo. Informal activities are concentrated in urban areas, while fishing villages are thinly spread in rural areas. The study was conducted in Masaka Town and all its divisions, i.e. Kyabakuza,

Nyendo, the rural Mukungwe, and the fishing sub-county of Bukakata, i.e. Bukakata and Lambu landing sites.

6.3.5 Masindi District

This district is located in mid-western Uganda and was chosen to represent the mid-western part of the country. It occupies an area of 9,326 sq. km. and shares borders with the districts of Nebbi in the north-west, with Lake Albert (Mutanzigwe) separating them. The Gulu District stretches to the north of Masindi, with the Victoria Nile separating them. The Apac District is to the east, with the Victoria Nile separating them. Luwero and Nakasongola Districts border Masindi along the south-east, while the Kiboga District is to the south and the Hoima District borders Masindi on the southwest. This is a district with a low population that is attributed to the prevalence of the tsetse fly since earlier times. It is only since independence and after the government had destroyed the flies that migration to it increased. In 1991, it had only 260,796 people. Interestingly, all ethnic communities of Uganda and beyond is found in this district. Fifty-six languages are spoken here and for this reason it is called the 'United Nations' of Uganda. The main economic activities are agriculture, ranching and fishing, pit sawing, saw milling, fishing, cotton ginning, processing of skins and hides, manufacturing of jaggery, oil and grain milling. The informal activities and small-scale industries are concentrated in the urban areas, fishing sites, and are furthermore thinly spread throughout out the rural areas. The study was conducted in Mutunda, Kiryandongo, Kigumba, the Buliisa sub counties, Masindi Town, and at the Wanseko fish landing site.

6.3.6 Soroti District

Soroti District covers 5,630 sq. km. and is located in Eastern Uganda. It is bordered by Lira in the north-west, Katakwi in the north-east, Kumi in the south-east and Lake Kyoga in the south-west. Soroti is the administrative and commercial headquarters as well as the name of the district. It is part of the former Teso District and has a population of 450,390.

There are more females (220,860) than males (209,530) in Soroti and the largest part of the population (85%) lives in the rural areas. The district has three counties and one municipal

council, Soroti Municipal Council. The counties are: Kasilo, Serere and Soroti. Many languages are spoken in Soroti but *Ateso, Kumam and Kiswahili* are the mainly used. The major economic activity is agriculture (Uganda Districts Information Handbook, 1997:129-30; The Monitor Business Directory, 2000:42).

6.4 Study population

The term “population” has wide application. In ordinary usage, it is defined as... “the total number or quantity of things in a given place” (Oxford Dictionary, 1976:859). It is that eligible or “candidate” population upon which a study is conducted. In scientific application, the attributes are defined. The number or quantity is weighted. Attributes are clearly designated by name. The place of study must have an exact name. The ordinary usage provides the platform for science to build up on. That means that a scientific definition or explanation goes beyond the ordinary usage. This definition states, “... population is that number or quantity of things under consideration, of which the statistical attributes may be estimated by the study of a sample, or from which a sample is drawn” (Simpson & Weiner, 1989:127). Population represents the totality of persons and organisational units with which the research problem is considered (Seaberg, 1988:240).

In this study, the target or study population was those persons and organisational units that are engaged in various trades in the informal sector in Uganda. They are the men, women, and children, able and disabled who for some or other reason were not employed in the formal sector. It included those persons who are employed in the formal sector but who, for one reason or another, found it attractive, or convenient, to engage in certain informal trades “to make ends meet”. Included here are all micro-enterprises in the informal sector. The scope includes the Urban Informal Sector (UIS) and the Rural Off-the-Farm activities.

6.5 The samples

When the target population turns out to be too large for the study to handle effectively, or when the geographical area is more widespread than originally planned, or the resources are inadequate, a portion of it or a sample is used. A sample is that portion of the target

population on which generalisations can be made (Bailey, 1994:82). It is a set of elements (or, units) drawn from a larger population (Baker, 1994:149). The crucial decision, however, is how to select the sample that will truly represent the population to which the findings would be generalised (Nkpa, 1997:34).

In this study, two samples were used. The first one was the sample of districts of Uganda that were studied. The choice of the sample of the districts was based on their inclusive national characteristics and was therefore purposive. The regional distribution was kept in mind when selecting the sample. The justification for doing this was that each region has major characteristics peculiar from the other regions. By studying a district per region, the study would then capture the image of a national population. The inclusion of the sixth district, i.e. the city district of the country, was essential because this is a district with a heterogeneous population that has 80% of its population engaged in the informal sector activities. All ethnic communities are represented here. And more importantly, the informal sector entrepreneurs from almost all parts of the country can be found in the city district. It is the capital city, as well as the district, where all activities, formal and informal are found in large numbers. This district reinforces the findings from regions.

The second was a sample of the estimated 1.5 million entrepreneurs in 800,000 non-farm micro and small enterprises mentioned in the *Policy Paper on Micro and Small Enterprises Development in Uganda* (Snyder, 2000:8). The enterprises were automatically sampled as their owners were being interviewed. The second aspect of the sample was the practitioners or entrepreneurs themselves. In defining this sample, the following considerations were borne in mind. Any person to be included must have been consistently involved in informal activities for at least six months. It did not matter whether the person was a woman, a man, or a child, able or disabled. And the enterprises should be visible. The person had to be located within the districts of study.

6.5.1 Sample size and sample frame

The reason for collecting data about a sample is to draw conclusions about the entire population. Quite often the problem becomes one of estimating the sample size. A debate

continues among the social scientists as to the size of a sample in a given study. However, there is some general agreement among them that the bigger the sample the more representative it could be. Fowler (1993:27), for example, points out that “the larger the size of a sample and the less of the variance of what is being measured, the more tightly the sample estimates will bunch around the true population value, and the more accurate a sample-based estimate will be.” According to Glazier and Powell (1992) the size of the sample should be neither excessively large nor too small. An optimal size is one that fulfils the requirements of efficiency, representativeness, reliability and flexibility. Nuwagaba (1998:35) advises that for the sample to be adequate, it must follow conventionally scientific procedures. The principle is that the information elicited from the selected respondents must represent the subjects in the entire survey population, and that the results obtained should be “generalisable” to the entire population (N). Additionally, even if one hundred repeated surveys were carried out in the same area with the same objectives, they should elicit the same information. What this amounts to is that a) the population size is known, and b) its characteristics are also known. It is on that basis that a scientific calculation is made from a given population.

As stated in the preceding section, two types of samples were selected: the sample of the districts and the sample of entrepreneurs. Uganda presently has 56 districts, and it is estimated that the informal sector has 1.5 million entrepreneurs. A sample of six districts was selected out of the present 56 districts of Uganda. The selection of the sample was based on the purposive or judgmental sampling technique. A purposive sample is a form of non-probability sample in which the subjects selected seem to represent the needs of the study (Baker, 1994:163). This was a conditional laid down by the district authorities before research permits were granted. The purpose was to facilitate communication between the central government and the local district governments concerned in the study.

The second sample was that of the entrepreneurs. These were entrepreneurs from the selected districts only. The sample size was 602 entrepreneurs for the five districts where the final study was conducted and 38 focus group discussions from the sixth district

(Soroti District). The sample frame was designed as follows:

District	Sample (N = 602)
Masindi	123
Lira	123
Masaka	125
Kampala	129
Mbarara	102

Since sample N is large (602), sample estimates were taken to be normally distributed with a mean of 120.4 and a variance of 42.8. The total standard error of the sample mean was found to be 2.94, i.e. the researcher wanted to be practically certain that the coefficient of variation of the sample estimate does not exceed 2.94%, which is the average error that had to be tolerated in the study. This made ample provision for reliability, considering that normally reliability is set at .95 or .90. The sample proportion would therefore fall within .05-5 percentage points of the population proportion. From statistical estimates, the proportion of the population in the sample was found to be zero, implying that the population from which the sample was selected is infinite. This is reinforced by the fact that the actual number of entrepreneurs and the number of enterprises in the informal sector in Uganda are unknown. It is a policy guess that they number 800,000 employing 1.5 million people. From observation, it appears that there are many more than that. Secondly, the decision on the size of the sample was based on what Maxfield and Babbie (1995:206-7) describe as a sample selection based on the researcher's own knowledge of the population, its elements and the nature of the aims of the present research. This study aimed at the identification of the information needs and uses of the informal sector. Also the finite population estimation showed that the target population is complex. A population is said to be infinite if there is, at least hypothetically, no limit to the number of elements it can contain.

6.5.2 Sampling problems

In this study, a number of extraneous factors impacted upon arriving at a calculated sample for the entrepreneurs. The first one is that the size of the informal sector is not properly known. The normal course of action would have been to carry out a census of informal enterprises at the time, but this too was found impractical at the time (January-July 2001) because the study coincided with the period when the Presidential and parliamentary campaigns were taking place in the country. Secondly, it was realised in the field that the study areas were too wide and people involved in them were sparsely distributed throughout the districts. It would have been very expensive to move around within the time allocated for the study. Consequently, there was too little time to cover all five districts within the specified time limit.

Based on the difficulties experienced above, and also on the realization that the informal sector is quite complex because of several trades involved, the sample was not, therefore, calculated. Instead, it was intuitively decided that at least a minimum of one hundred and a maximum of one hundred and thirty persons would be interviewed per study area. Sample sizes of each stratum were fixed at 100-130 elements. This was considered a large sample, bearing in mind that there are many activities in the informal sector from which to choose. The sample was, however, selected using both proportionate and disproportionate stratified techniques. A proportionate and disproportionate stratified sample is one where some subgroups of a sample have a fair share of weight in the analysis. In mathematical terms, all samples are weighted.

Proportionate and disproportionate samples are taken from a non-homogenous population under study in order to obtain a sufficient number of under-represented members from each sub-group of a population to study. If the sample were to be proportionate in all subgroups, it would mean that some trades would be "over sampled" (Baker, 1994:134). This would be misleading because some sub-groups have few entrepreneurs, while others are flooded. For example, traders in herbal remedies, stamp makers, traditional birth attendants and shoe-shiners are relatively fewer in their trades compared to food processors or traders in retail items. The population was, however, stratified

geographically by district so that the elements within each group were more alike than the elements in the population as a whole. The main characteristic identifying the population and the sample was the involvement of people in informal sector activities. Thus, the resulting strata were homogenous.

The district leaders provided some information about the organisations that normally participated in programmes related to community issues. This information was accordingly used to approach these organisations. As for the informants, the district leadership provided names of the types of persons who could be helpful in the study and they were met in their places of activity. For example, informants included local council members at grassroots level, head fishermen (*gabungas*) and opinion leaders whom the entrepreneurs mentioned as being people with a wealth of experience.

6.6 Data collection instruments

The principle in data collection is that the methods should be related to the type of information sought. Such methods should be efficient, practical, feasible and ethical (Marshall & Rosen, 1995: 104-5). They should permit the researcher to study issues in depth and detail (Patton, 1990:165). In this study, interview schedules for the entrepreneurs, organisation and informants; an observation guide; voice recordings and a camera were used. Since the study was about the entrepreneurs, the interview schedule was the main instrument for gathering the required data.

6.6.1 Interview Schedules

In-depth interviewing is a data collection method relied on quite extensively by qualitative researchers (Marshall & Rossmann, 1995:80) and was found to be a suitable strategy to use in this study. Because it was the main instrument for gathering data, it was used to uncover and describe in some detail all issues raised in the research questions. Three types of interview schedules were used: one for the main respondents, one for organisations and one for informants.

The interview schedule for the entrepreneurs covered nine main issues namely:

- demographic factors,
- general characteristics of the sector,
- views of the entrepreneurs on the informal sector,
- characteristics of business enterprises,
- information needs and information seeking behaviour,
- information flow and access,
- use and impact of information,
- constraints to accessing information, and
- suggestions to solve the information gap.

In each issue, there were supplementary questions aimed at deeper inquiry of each main issue. Both open-ended and closed-ended questions were included in the interview schedule. An open-ended question is that which allows the respondent to answer in his or her own words. A closed-ended question is defined as one that forces the respondent to select from a list of possible responses (often called *forced-choice* question) (Baker, 1994:473-79).

Open-ended and closed-ended questions have complementary strengths as well as weaknesses. According to Judd, Smith, Kidder (1991:239), open-ended questions allow respondents to convey the fine shades of their attitudes to their satisfaction instead of forcing them to choose one of the several statements usually found in closed-ended questions. They allow the respondents to answer questions in a relatively unconstrained way and they help in the formulation of a hypothesis.

According to the same author, closed-ended or fixed alternative questions are equally good because they enable respondents to compare alternatives and helps them to select the choice closest to their own position. Closed-ended questions also help to clarify the intent of the question for the respondent. They are easily coded to produce meaningful results for analysis.

The decision to use both types of questions was taken in order to reap the benefits of the

strengths of both types. Findings from these instruments are reported in chapter seven and are discussed in chapter nine.

To apply this instrument, each research assistant was given a set of the interview schedules to take to along to the interviews. In each interview, the language in which the respondent felt comfortable to answer the questions was used. The role of the research assistants was to interview the respondents by reading out the questions or statements and leaving the respondent time to ponder about them and provide the answers. The research assistant would then write the answer in the English language, if the questions or statements were read out in a local language. However, in cases where the question or statement was found to be abstract, as in information related questions, they (the research assistants), offered an explanation using local languages until the concept was understood. Occasionally, the assistants would refer the difficult concepts to the principle researcher for clarity. Such incidences allowed the research assistants to develop a better understanding of the issues involved in the interview process.

The interview schedule for organisations was meant to solicit information regarding their involvement with the informal sector. It was assumed in chapter one that at least some organisations have working linkages with the informal sector. On the strength of that assumption, they were interviewed. The interview schedule consisted of seventeen questions organised in three sections.

- Section one sought background information about these organisations.
- Section two was to assess the capacity of such organisations to serve the informal sector with information.
- And section three was aimed at seeking their opinions about the information needs of the informal sector.

The principle researcher administered this instrument to the organisation representatives soon after the district authorities had granted the necessary permission. All questions were open-ended. Once the question was read out, and the reply was received from the

respondent, the researcher wrote down the answer as stated. This direct contact with the respondents allowed further clarifications to be made there and then. Findings resulting from this instrument are reported in Chapter 8, Section 8.2. while part of the discussion is contained in chapter 9. This instrument is designated as Appendix E.

The guideline for the informants consisted of three sections comprising twenty-two questions.

- Section one sought background information about the informants themselves in relation to the informal sector.
- Section two referred to information provision to the informal sector and allowed entrepreneurs to voice their considered view about information utilisation by the entrepreneurs.
- Lastly, section three sought their opinion about informal sector information. This instrument is designated as Appendix F.

As for the organisations, the principal researcher administered the interview to the informants. All questions were open-ended. The role of the interviewer was to ask the question or make a statement and wait for an answer and record it. The interview for the informants was conducted prior to that of the main respondents. The findings resulting from this instrument are reported in Chapter 8, Section 8.3 and form part of the discussion in chapter 9.

6.6.2 Observation Guide

In the context of this study, observation is a face to face encounter with respondents. Observing events in a natural setting was done to establish what events or work situations are relevant to the objectives of the study. Observation entails the systematic noting and recording of events, behaviours, and artefacts (*objects trouvés*) in the social setting chosen for the study (Marshall & Rossmann, 1995:79) Signs and gestures are also captured. Observation emphasises seeing the informal sector through the eyes of the actors.

The aims of using this instrument were: to explore recurring patterns of information seeking behaviour and relationships, to note events going on in the work environment and to use the findings to crosscheck answers on interview schedule.

The observation guide consisted of five sections.

- In section one, the purpose was to establish the general characteristics of informal businesses.
- Section two represented information about the management systems in the informal enterprises.
- Section three was to establish the relationship between the informal sector with the society as a whole.
- Section four aimed at understanding the communication systems used by the entrepreneurs in the work environment.
- And finally, section five looked into the problems in the work places. The instrument is denoted Appendix G.

This instrument allowed the collection of data rather quickly and facilitated identification of nuances in cultures. The technique was used to observe what goes on, what exists in the work environment and how workers themselves behave in the work situations. It was useful for establishing the work site conditions and the locations of business sites vis-à-vis the markets for their products and specifically the information seeking behaviour of the respondents.

The observation methodology assumes that a particular behaviour is purposive and expressive of deeper values and beliefs (Marshall & Rossmann, 1995:79). Data resulting from this instrument is reported in Chapter 8, Section 8.4 and in a part of the discussion in chapter 9.

Through observation, the principal researcher was able to establish the characteristics of enterprises, and the entrepreneurs, the management systems applicable to those enterprises, the relation between the enterprises and the rest of the society around which they are located. It also helped identify the information-seeking behaviours and the

meanings attached to those behaviours as well as problems affecting these enterprises. The findings of the observation were then recorded in the spaces provided in the observation schedule.

6.6.2.1 The Tape recorder

Voice recording as a technique of data collection was used in representative cases only. These were four in number. They included a vice-chairperson of the informal sector, the chairperson of the *Jua Kali* Association, the chairperson of the Millers Association and the fishermen. Voice recording allowed recording of verbatim accounts of these respondents. Only unique and representative cases were tape-recorded. The voice recorder captured exclamations, anecdotes, and comments that manual recording in the interview could not do. The reason for doing this was to identify areas of emphasis in the respondents' work. After recording of the interviews, the tapes were replayed to the respondents who were too delighted to hear their own voices. The tapes were taken and given to a qualified secretary for verbatim transcription and word processing. The researcher then participated in minimal editing of the text but retained the respondent's language and style. In this way meanings attached to statements of respondents were understood. Data from this source is included in the discussion in chapter 9. Data transcribed from this technique is reported in Appendix.A.

6.6.2.2 Photography

Photography has a long history in anthropology. Photographs provide a visual record of events. As a specific instrument for data collection, it was used to supplement the interview schedule and observation guide. The inclusion of photographs stemmed from the need to prove that the sector is indeed heterogeneous. Use of photographs to depict the various informal activities is evidence of the nature of the sector. A camera was used during data collection. Colour film was used to provide pictures of as near as real time situations on the ground. Pictures are presented as exhibits. They are numbered systematically together with the pages. They appear as exhibits.

6.6.3 Document analysis and review

The major source of secondary data in a study is the analysis of documents (Bailey, 1994:294). Documents are materials that contain information about the phenomena to be studied. Document analysis is the process used to examine documents and records for relevant information (Nkpa, 1997:7). Taking into account that the informal sector began long time ago, it was important to take into account some background information about its past. Document analysis, therefore, provides the link between the past and the present.

Although documents vary significantly in quality, many documents such as newspaper columns are written by skilled persons and may be much more valuable than poorly-written responses to mailed questionnaires (Bailey, 1994:295-296). Besides, literature review helps to narrow and to more clearly delineate the research problem. It assists in developing a firmer understanding of the subject under study (Busha & Harter, 1980:19). Information institutions visited to access information included the Uganda National Library, Faculties of Social Sciences, Sociology, History, Fine Art and Education at Makerere University, and the Centre for Basic Research (CBR). The National Museum (Uganda Museum) was particularly rich in informal sector relics. Discussions with cultural leaders, *Bazeeyi* (very old people) generated data about the origins of the informal sector, how the sector was regarded and the effect of colonialism and modernisation on it. More information on the subject was derived from dissertations related to informal sector activities in Makerere University Library and from Government Ministries, especially that of Labour; Planning, and Economic Development, and Trade and Industry; Kampala City Council and Districts Archives.

A comprehensive review of documents and a list of reference materials, or bibliography was compiled as a guide to the study. Information institutions with this information were visited and their catalogues inspected and databases scanned. Membership was obtained to institutions that have information, including PRESTO. Their documents were scanned and read, and relevant information was extracted. In the case of electronic databases, relevant sources in EBSCO, IFLANET, First Search, Wilson's Library Literature, LISA, SABINET, BUBL1, and GOOGLE Search Engine, among others, were accessed. Data

from these sources was compiled and used during the writing of the report.

6.7 Reliability and validity of instruments

Reliability and validity are central issues in all scientific measurement (Neuman, 1997:137). Both concern the way in which concrete measures are developed for a construct. Reliability is about achieving stability, dependability and consistency of research instruments. It is expressed as the degree to which a measurement procedure produces similar outcomes when it is repeated (Baker, 1994:480). Validity refers to the internal consistency of the measuring instrument (Nkpa, 1997:61). On the other hand, validity is an indicator that an instrument is actually capturing the meanings of the construct as expected. It is the degree to which an instrument measures exactly what it purports to measure and nothing else (Nkpa, 1997:69).

To achieve the desired reliability and validity, the instruments were pre-tested for clarity, completeness, relevance and shortcomings among members of the faculty and it was piloted in Soroti District.

Secondly, triangulation of data sources, and investigator triangulation insured the validity and credibility of the data. Triangulation means using different types of measures, or data collection techniques to examine the same variable (Neuman, 1997: 151). In this study, the measures were interviews, observation, tape recordings, photography, and document review and analysis. In each case the strategy entailed checking findings against other sources and perspectives. Thus, the consistency of findings generated by the different data collection techniques was validated. Triangulation of data sources involved comparing and cross-checking the consistency of information derived at pilot and final study. In effect it meant comparing interview data with observational data; voice recorded data with interview data; pilot data with final data; field data with secondary data; and checking for consistency in what people had to say about the informal sector in different districts. This all amounted to validating information obtained from interviews, observations, voice recordings, photographs, and from artefacts.

Thirdly, by using more research assistants, i.e. investigator (analyst) triangulation, the potential for bias that could creep in had one person done it all, was minimised. Every district studied had a different set of two research assistants each. This provided a means for directly assessing the reliability and validity of data. According to Denzin (1989:313), intrinsic biases could be overcome by having two or more persons independently analyse the same phenomena and then compare their findings and combine them with the different methods and data sources.

6.8 The Research Strategy

The research strategy involved formulating the topic, writing the proposal, applying for research funds seeking permission, training the research assistants.

6.8.1 Permission

The reference letter introducing the researcher as a *bona fide* student of the University of Zululand was sent by the promoter to the Academic Registrar, Makerere University. The Academic Registrar's Office, in turn, presented a photocopy of that communication to the Makerere University School of Postgraduate Studies (MUSPGS) for funding purposes and in order to apply for the necessary research permit from the NCST.

Permission to conduct research in Uganda was obtained from the National Council of Science and Technology (NCST). The Council approved the study in liaison with Makerere University. It sent letters to all districts where the study was to be conducted and copies of those letters were given to the researcher to take to the Resident District Commissioner (RDC) for identification. (Appendices C1-C5) show copies of that communication. The NCST provided the researcher with an Identity Card (ID).

6.8.2 Research Assistants

After meeting with district leadership, research assistants were identified for every district and trained. These were persons born and resident in the districts of study, or those that were studying at Makerere University but who came from those districts. The purpose of training was to achieve several objectives. First, it was to brief the assistants

about the objectives of the study. Second, it was to explain their roles in the study, including how they would conduct themselves while in the field. And third, it was to brief them about the sequence of activities to be carried out each day.

The training covered translation of the interview schedule into local languages, the techniques of conducting the study, a review of the interview schedule, methods of interviewing and recording data. The English interview schedule was also translated into local languages, namely Luo, Luganda, Luchope, and Runyankole. This was done because the literacy rates are low, for example, the literacy rate for women is 50.2 % as against 73.7 % for males (Snyder, 2000:32).

As a result, multilingual instruments were used in order to help the research assistants in situations where they could not interpret local language concepts at an advanced level, and also to assist the respondents to capture quickly the intended meaning once the question or statement was read out. The master instrument, of course, was an English version of the instrument. These translations are contained in Appendix D2-D4.

6.8.3 Data Collection

Each research assistant was given a sufficient number of interview schedules to ensure that fieldwork proceeded uninterrupted. Fieldwork was conducted in one district at a time until all the five districts were covered. The Soroti District had been covered a year earlier.

The researcher supervised the research assistants during data collection. The assistants asked questions directly from the interview schedule to the respondents and recorded their answers on the spaces provided in the interview schedule. In using this technique, the highest rate of data capture and data quality was achieved. The researcher himself carried out the observations and recorded what he saw. He participated in tape recording and photography.

Two data types, namely the secondary and primary data, were collected. Secondary data

was captured through document review in order to gain insights into the history and development of the informal sector. Interviews were also conducted among the informants to gain more information about the development of the informal sector during contemporary times.

Conducting interviews among the entrepreneurs and the organisation representatives, the informants captured primary data by means of observation, photography and tape recording.

Six hundred and two entrepreneurs were interviewed. The aim was to explore the informal sector, the entrepreneurs who are engaged in it and the information behaviour of the entrepreneurs in order to answer issues relating to the research problem.

Twenty-three representatives of organisations were interviewed. The aim was three fold: to establish from the organisations their relation with the informal sector, to establish their capacity to serve the informal sector entrepreneurs with information, and to establish the type of information they usually provide to the informal sector entrepreneurs.

Thirty-five informants were interviewed primarily as a source of gaining insight about the informal activities in research areas. The informants were persons comprising community leaders, experienced informal sector workers themselves, and/or local chiefs. Community leaders were persons with vast experience about their localities. In some cases they were informal sector workers themselves. These people were in a better position to give information (data) about the informal activities going on in their areas and about who were involved in them. Three types of data were required from the informants: information about the definition of the dimensions of the informal sector, discovery of boundaries of the sector, and increasing knowledge of the research problem. Preliminary data from this source was used for planning the pilot study, for actual data collection and for guiding the process of data collection. Data was also used to provide information about those involved in informal activities, where they are located, the nature of

activities, etc. As Trembley (1994:98-101) states, key informants are selected according to their roles in the community, their knowledge of the communities (because they have direct access to information desired), their willingness to communicate their knowledge to the researcher, and their impartiality and reliability.

Apart from the above, the observation methodology was used to capture what was relevant to the study. The voice recording of four respondents' answers was done while the interviews were proceeding. In addition, data capture using a camera was done on selected activities.

6.8.4 Ethical considerations

As a matter of principle, ethical considerations were kept in mind when conducting fieldwork. Respondents were assured of their rights, including rights of consent, protection from disclosure of information and respect for their privacy. Informed consent was obtained from each participant in the study in order to ensure a clear understanding and willingness to participate in the study. Anonymity and confidentiality was promised and maintained.

At all times, the researcher and his assistants introduced themselves prior to the interview. Appreciation of their involvement in the study was acknowledged. This etiquette was followed because social research is a dynamic process that involves respondents and researchers. It is based on mutual trust and co-operation. Because of the freedom of action involved, research practice can have adverse effects on the participants thereby causing serious problems to the subjects and the community in general. Trust is also important because research is a continuing activity. Creating displeasure causes problems in the future. Besides, research freedom could violate the rights of those involved in the research process, therefore unwritten standards and principles, that is ethics, must be followed or rejected. According to Sarantakos (1993:23), accuracy in data collection and processing, the use of appropriate research methodology, appropriate interpretation of the data, accurate reporting, the non-fabrication of data and/or criminal misconduct are eight elements that a researcher must bear in mind in order to do a

professional work. The researcher must maintain confidentiality and secrecy of what transpires between him/her and the respondents.

The research team met all the requirements such as proper self-identification, clarity of purpose, and obtaining free and informed consent. The team also respected the right to privacy of respondents, anonymity and confidentiality.

6.9 Pilot study

The study investigated the information needs of the informal economic sector in Uganda. The uses to which the sector puts the information it acquires were explored as well as the role and impact of information in the growth and development of the sector.

A survey research technique was used in the pilot study, with data collected largely through interviewing of respondents, key informants and organisations, and observation by means of voice recording and photography. The pilot study was conducted in June /July 2000 in the Soroti District.

Preliminary findings showed a variety of information needs, uses, effects, channels, languages, sources, and constraints. The study was extremely valuable for testing research instruments. The study's results indicated a need to simplify the packaging of information, and to improve on its delivery. The results of the pilot study were published " A study of the information needs and uses in the informal sector in Uganda: Preliminary findings in LIBRES: Library and information Science Research. Electronic Journal ISSN 1058-6768. 2001 On line journal. Volume 11 Issue 1; March 31 Bi Annual. (http://aztec.lib.vtk.edu.au/pub/libres/LIBRES_11N1/ocholla.html)

- **The information needs.** The informal sector's information needs included markets and marketing information, sources of raw materials and supplies, sources of advice, contracts, advertising, and information about government policies.

- **Information use.** The uses to which the entrepreneurs put information included: for locating markets, promoting business, locating inputs, for business development, for determining prices and pricing techniques, securing skills, obtaining contracts, and getting loans.
- **Impact of information use.** As a result of using the specific information, the entrepreneurs were able to realise some benefits such as: general business improvement, business expansion, better business management, increased marketing opportunities. Information use also led to adoption of appropriate technology, more customers and profits, more investment, new lines of production, more job opportunities, and employment.
- **Information channels.** The entrepreneurs preferred receiving information by word of mouth, radios, newspapers, telephones (especially cellular phones) as the most appropriate channels of accessing information. They preferred information brought to them mostly in local languages. Those who are proficient in English and Kiswahili highlighted those languages as the ones in which they preferred to obtain information.
- **Sources of information.** Entrepreneurs mentioned interpersonal contacts, personal experience, reading newspapers, use of radio, and extension agents and social networks as the sources that they usually rely on to access information.
- **Constraints.** In spite of the need for information or capability of accessing it, it was not without a price. The entrepreneurs had experienced problems in seeking and accessing information. They enumerated unreliability of information obtained verbally, the practices of hoarding of information by fellow entrepreneurs, the lack of knowledge of places where to get the required information, and the absence of specific places to obtain information as the main problems experienced. Furthermore, they cited ignorance of information sources, lack of time to look for information, illiteracy, and incapacity (due to factors such as desperation, apathy, being disabled, negative attitudes to situations that interfere with their normal routines, restrictions

enforced by husbands – in the case of women, and the poor attendance in meetings where information is delivered.)

- **Recommendations:** As a result of the survey, the entrepreneurs were of the view that to make information widely available to them, it was initially important to simplify what is called information and its delivery. They said that what is called information had been taken for granted by them. This often led to treating ‘hearsay’ news as correct information. They also recommended that whenever information was given, it was essential to do follow-ups in order to build on what had been given already. In this way it would reinforce the understanding of important things that had been conveyed to them. To facilitate communication of information so that it is understood, its packaging should be in the languages mostly spoken by the entrepreneurs. And for that information to have value, they recommended that it should be delivered together with an appropriate activity that would enable them to absorb the information while performing the tasks. Relating information together with practice was, in their opinion, a better way to understand it well. As a result of not being aware of the information providers in their areas, the entrepreneurs recommended that institutions that have such services in the district and outside should be identified and made known to them. They considered this as a way of reducing ignorance. Development of alternative information service for the informal sector was strongly suggested. As alternative information facilities, they recommended that information repackaging should be emphasised in order to ensure that information is not left idle for lack of use due to poor presentation. Lastly, they recommended that it was important to train entrepreneurs in information appreciation, information seeking, sourcing and use if entrepreneurs were to become effective information users.

- **Lessons from the preliminary study**

The major lesson learnt from the pilot study was that pre-testing instruments form an important aspect of research because they normally show areas in which instruments are weak, are not well understood, where there are repetitions and where steps should

be taken to correct those parts in good time. Generally, this approach increases the reliability and validity of instruments. Secondly, piloting is a useful approach to testing the entire methodology. It indicates whether a particular method was suitable or not. Pilot testing provided a picture of the final results.

6.10 Data analysis

It is restated here that the study employed the survey, observation and the critical incident methods for collecting the data. To gather the required data, different instruments were used, including:

- the interview schedule for the entrepreneurs,
- the interview schedule for the organisation representatives,
- another interview schedule for the informants,
- the observation guide,
- tape recorder, and a
- camera

In addition to these, field notes captured the process of interview or observations, albeit only the salient aspects of statements, anecdotes, clichés or expressions that highlighted certain specific issues. Examples of such issues are highlighted in the limitations of the study.

In general, the instruments, i.e. qualitative and quantitative data, generated two types of raw data. The instruments had been constructed in such a way that they covered three time periods, namely the past, the present and the future. The critical incident technique was used to elicit information to all questions relating to the past.

The instruments consisted of its title, nature of the study, space for the name of the interviewer, area of interview and date of interview. A self-explanatory introduction and goal of the study provided the preliminary background information. In the content of the protocol were seven themes corresponding to the research questions. In each theme, there were questions that were answered by the respondents. The questions provided boxes for ticking off the right answers, or encircling them, and for the filling in of answers in

spaces provided (as in the case of qualitative questions), and the numbering of selected answers in accordance with their order of importance.

The major form of analysis in all of the instruments involved organising the data in order to address the primary research questions. In order to do that, the following steps were taken:

Step 1: All completed units were brought together and sorted according to the trades. This first classification process brought out the clusters of the different trades, which in the end provided the composition of the informal sector enterprises studied.

Step 2: Each cluster was counted to establish the number of respondents who had been interviewed in each category.

Step 3: All categories were put together and the total for each study district established.

Step 4: Editing followed. It is a principle of data treatment that data must be edited (Mulusa, 1990: 183-84; Peters, 1994:97) for clarity, accuracy, completeness and uniformity of the data. Editing established incomplete data, missed questions and instances where the occurrence of incompleteness was so great that such units had to be excluded. Only those data units that passed stage four were accepted as valid for analysis purposes.

Step 5: The edited data was assigned a serial number for control purposes.

Step 6: Coding was the next step. Codification of the data involved transformation of the information (the raw data), into a form that can be quantified for analysis (Baker, 1994:317). This was done for the qualitative questions.

The first thing that was done was to resolve the issues of definition and/or ambiguity so that the codes could be applied consistently. It required making decisions on the basis of how best to code responses to the variables (concepts, phrases etc.) so as to maintain the same meaning of the concept, which it represented. For example, some responses stated, "I get income from my business," "I get money from this business", "I earn a living from it". These answers were all valid. But for the purpose of coding, one key word, that is, a word in context, or a broad term such as "income" would be chosen and used consistently in all data where the above answers appeared. The term would then be

assigned a numerical value. This is the process of subjecting data to content analysis. According to Powell (1985:49) content analysis refers to the systematic, objective and quantitative analysis of the occurrences of words, phrases, concepts and the like, so as to be able to analyse the expressed content. The same author advises that the researcher will identify the unit of analysis so as to be able to identify, define and decide on a unit as a word, paragraph or theme. Its most important aspect involves producing categories that provide descriptive information relevant to the problem addressed. From the empirical point of view, coding of data is done in order to preserve the full variation given by the respondents as well as the actual meaning of the responses (Baker, 1994:318).

Step 7: The Statistical Product and Service Solution, formerly the Statistical Package for Social Scientists (SPSS), and the Excel package were used for the analysis of data from the main instrument. The emerging patterns were then presented using suitable methods of statistical representation such as frequency distributions, tables, and charts. These are shown in the next chapter.

The choice of SPSS was based on its popularity and wide availability for the analysis of social science data. It can also be used on almost all the survey data sets. The Excel package is available in computers as one of their programmes.

6.10.1 Categorisation of photographs

As a camera was used for capturing the different types of informal activities, it was also necessary for the themes to be reflected in the photographs. The value of photographs lay in showing the heterogeneity of the informal sector. The photographs were subjected to a matching criterion whereby photographs of related activities were put together. In this way, the main groupings were: art and craft trades, woodwork trades, metalwork trades, construction trades, technical services trades, trading, social services trades, garage trades, herbal medicine (remedies), rural off-the-farm activities (charcoal-making and shea nut trades), fishing and transport trades. For ease of reference, photographs are included in the study in the form of exhibits that are numbered in logical sequence.

6.10.2 Analysis of data from tapes

Strictly speaking, tape recordings documented interviews with the respondents. They, however, were not part of the sample of 602. Only four respondents were recorded. Their responses were reproduced verbatim and the findings were integrated into the study, although the transcription is produced separately in Appendix A1.

6.11 Data Interpretation

Data was interpreted according to the qualitative methodological approach modelled on the *grounded theory*. The decision to opt for such a research paradigm was motivated by the need to understand the social world from the point of view of the informal entrepreneurs themselves. This approach interprets and explains issues according to statements made by the entrepreneurs and is therefore called *the interpretative paradigm*. Its underlying philosophy seeks to understand the very basis and source of social reality. Such an approach is motivated by the need to understand an entrepreneur's work in relation to specific situations that call for action and meaning. The study was able to achieve this by asking mostly qualitative questions, and in analysing the data, the *emerging ideas brought about the meaning, or the sense that a human being makes out of the situation*. In doing so the interpretative paradigm moves closer to the sense-making theory enunciated by Dervin (1999).

In the sense-making theory, which has its origin in American communication research, it is stated that human beings try to make sense out of their actions through a construction [and reconstruction] process. It finds expression in behaviour exhibited by the individual, both internally (i.e. cognitively) and externally (i.e. procedurally), and allows the individual to construct and design his or her movement through space and time.

As a process, it is a form of problem solving; either or both the information sought (problem) and the search process (solution path) may be simple or complex. The process is as follows:

1. The first step involves the problem definition. This is the initial stage when an individual is busy recognising and defining the information problem and initiating the information action.
2. The second step is the selection of the source, which entails whether the information problem is well defined or not. The entrepreneur must choose an information source to begin the search.
3. The third step consists of the articulation of the problem. This function involves formulating a query or determining an entry point to the system. A fellow human being, institution or a channel may represent the system.
4. The fourth step entails examining or making an inquiry, or the interrogation of the results/source for information.
5. Fifthly, follows the extraction information. Once relevant information has been located, the user must study it, copy it and integrate this information so that it may be applied to the original problem (Itoga, 1992:330-344).
6. Finally follows the application of information to solving the problem, i.e. a response to why the information was required.

Sense-making behaviour is thus a form of communicating behaviour whose activities are information seeking, processing, creating and using information. Sense making is a process; sense is the product of the process. Sense, as a product is information, which can be knowledge, opinions or one's impressions.

The sense-making theory's philosophical foundations rest on constructivist assumptions and lays emphasis on the contribution of an individual. It adopts a critical stance towards objectivism and positivism. Positivism is a philosophical doctrine that postulates that scientific knowledge is limited to observable facts and experience. It is a belief that reliable information can only be obtained about events that can be observed directly. It therefore claims that science should only deal with observable and not hypothetical constructs (Stratton & Hayes, 1994:147; Odini, 1993). Its strongest points are found in the framing of the questions for interview, and in gathering information. For example, asking people about situations during which they were troubled and badly needed

information, what they did to satisfy the information problem, strategies that they used to obtain information and whether they were satisfied with the information that they had obtained.

The findings are presented according to themes. To ensure validity, a description was given on the basis of tabulated charts reflecting frequencies and percentages. The interpretation involved attaching significance to categories and providing explanations, drawing conclusions, making inferences, finding linkages among various parts of data and attaching meaning, identifying emergent patterns and themes, and checking these patterns and themes against data relevant to the research questions. Patton (1990:306) describes this process as inductive analysis in which taxonomies or typologies, indigenous or analyst-constructed themes (pp.393-400) emerge. Indigenous typologies are those created and expressed by respondents, while the researcher, in order to reflect distinct categories, creates analyst-constructed typologies.

6.12 Problems Encountered

Limitations to research are possible at any stage of the research cycle. The limitations could be internal or external in nature. Internal limitations could arise due to the research design, or because of methodological limitations. When and where these happened, they affected the way in which the study was conducted. For example, the interview schedule was extremely long because it was very detailed. This caused some discomfort among certain respondents. The concept, 'information' was in some cases very difficult to translate in local languages and this made it difficult for non-literate respondents to imagine what was meant. External limitations occur in terms of factors beyond the control of the researcher. Limitations in this category included political activities going on in the country during the data collection period, the teaching loads and some respondents' attitudes, among others. These shortcomings were noted and reported thus:

- **Census.** The census of the informal enterprises could not be carried out as planned. Reasons for this are already explained above.
- **Rain.** One of the characteristics of the informal sector is that most operations take place in the open air, under shady trees or in temporary shelters. It so happened that

the research period coincided with the rainy season, March – July 2001. Whenever it rained, both the researcher and the respondents dispersed to seek shelter in an appropriate place, or the respondents were in the gardens first thing in the morning and reported to business at about 10. a.m. This resulted in delays in interviews and, in some cases, interviews were postponed. The net effect was A disruption of the research timetable.

- **Bad roads and hot weather.** Even though it was a dry season in some places, travelling was the worst that the researcher had ever encountered in his life. The roads were extremely dusty. The researcher was part of the ‘luggage’ which, in all cases, was overloaded. In some cases the research involved travelling at night through jungles.
- **Research fatigue among the population.** The researcher had little idea that a lot of field research had been done in Uganda. The population complained that they are tired of researchers. *“What is the use of telling you our information and we don't get feedback?”* *“Your research is of no consequence to us. It is useless because how do we benefit?”* *“You people always come here. You are number this and that. Now how are we benefiting? Tell us?”* *“Ash! Don't disturb me!”* *“I am very busy. I am tired of you people”.* *“How sure are you that this time you will bring back the results?”* These are some of the very genuine questions and remarks of anguish that were met with during fieldwork in all districts.
- **Demand for some payment before interview.** *“Give us something, or are you going to give us something, money?”*, is an expression that has crept into the Ugandan society. People are not ashamed to ask to be paid very genuine before any information could be solicited from them. Although the amounts requested were insignificant, it indicated a dangerous trend. Information for money is likely to jeopardise the efforts of future researchers. Reference to some benefits in the future as recompense to being interviewed resulted in non-participation. It was their right. At the same time, research such as this would be one way for communities to become known and to obtain recognition. Indirectly it is of benefit to the community. •
- **Fear.** It was part of the procedure of the study to have a census carried out first so as to construct a sample frame and then decide on the sample to be interviewed. Only in

two districts was this attempted but not completed because the research coincided with the elections period for the presidency and parliament, and people refused to be enumerated. There was a false perception that the researcher would use names for political gains or to obtain favours for candidate A or Z. This forced the researcher to change the sampling methods to fit the circumstances.

- **Length of interview schedule.** The schedule had over one hundred issues for which information was needed. It was regretted that the interview schedule was long. *“Ash! Your questionnaire is too long. When are we finishing it? It has taken a long time. You should give me something to compensate this time”*. In some cases people were willing to offer 10-15 minutes of their time while at least one hour was required. If the interview went on much longer, they would not participate: indeed they were serious about this. Ethically, it was their right to refuse, and indeed they did.
- **Tricky respondents.** There were instances where some respondents in urban settings would carry on for longer than the estimated time allowed for interviews. Some interviews could take two-and-a-half hours to complete. Many interviews, punctuated by random stories during the course of interview, cost a lot of time and caused disruption of the arranged interview schedule. This did not augur well for those who were kept waiting. In some cases they were lost permanently. It was a lesson learnt.
- **Dissemination of researches findings.** This was the most crucial and authentic problem in the researcher’s view. How do the respondents know what would be done about the results of the research? In this study, taking back photographs to them would be one way. But this is not enough. People in the field are complaining. Researchers do not go back to tell their subjects the effect of their research.

6.13 Summary

This chapter represented the research design and methodology by discussing and describing how the research was conducted and by relating problems encountered. It is observed that data obtained through the pilot study, though preliminary in nature, closely matched the results from the main study on chapter seven. The following chapter, Seven, presents findings from the main instrument, namely the interview schedule.

CHAPTER SEVEN

DATA FROM ENTREPRENEURS

7.1 Introduction

The main objective of the study was to identify the information needs and uses of the informal sector in Uganda. The demographic characteristics of the entrepreneurs, their business and cultural characteristics, their information seeking behaviour, sources of information used and the uses and impact of information on the sector were established. Similarly, the constraints to information access and gaps in the country's information sources, systems and services were explored.

A survey method was employed to conduct the study. Four instruments namely interview schedules, observation guide, voice recorder and a camera were used.

The study was conducted in five districts. Each district was selected from a region. Uganda has four traditional administrative regions. These include the Eastern, Northern, Western and Central regions. Kampala is both a district and a capital city and part of the Central Region. Since it is a cosmopolitan area with all ethnic communities of Uganda represented in it and due to the fact that the district is the hub of all business in the country, it was considered appropriate to reinforce data from the four regions. For clarity sake it is necessary to mention that a group of districts make up a region, and regions make up a country. A sample of 602 respondents was interviewed. These included both male and female, adults and youth, both able and disabled persons. This chapter presents data from the main instrument, the interview schedule. The schedule had a set of seven research sub-themes from which research questions were developed.

7.2 Nature, scope and characteristics of the Informal Sector

This section covers research question one, which aimed at establishing the demographic characteristics of the entrepreneurs in the informal sector. It responds to the research

objective that was to establish, categorize and document the informal sector activities in Uganda. Therefore, the study sought the following information from entrepreneurs: their ages, where they come from, their educational attainments, occupations and how job skills were acquired. Furthermore, the study inquired after the languages that informal entrepreneurs speak, write and understand well; reasons for which they work in the sector; and activities involved in before joining the sector. The study also explored the reasons why these entrepreneurs remained with their trades, and whether the informal sector is their main source of income or not. Factors motivating the entrepreneurs to invest in the sector were investigated as well as those that would demotivate them. Finally, the influence of the sector on the lives of entrepreneurs and the role that it plays in their individual lives and the nature of business ownership were also explored.

7.2.1. Age

Workers in the informal sector were found to spread across all ages. The largest population was youthful and therefore economically active. Fig 3 below shows population distribution. In all there were 602 entrepreneurs who were interviewed.

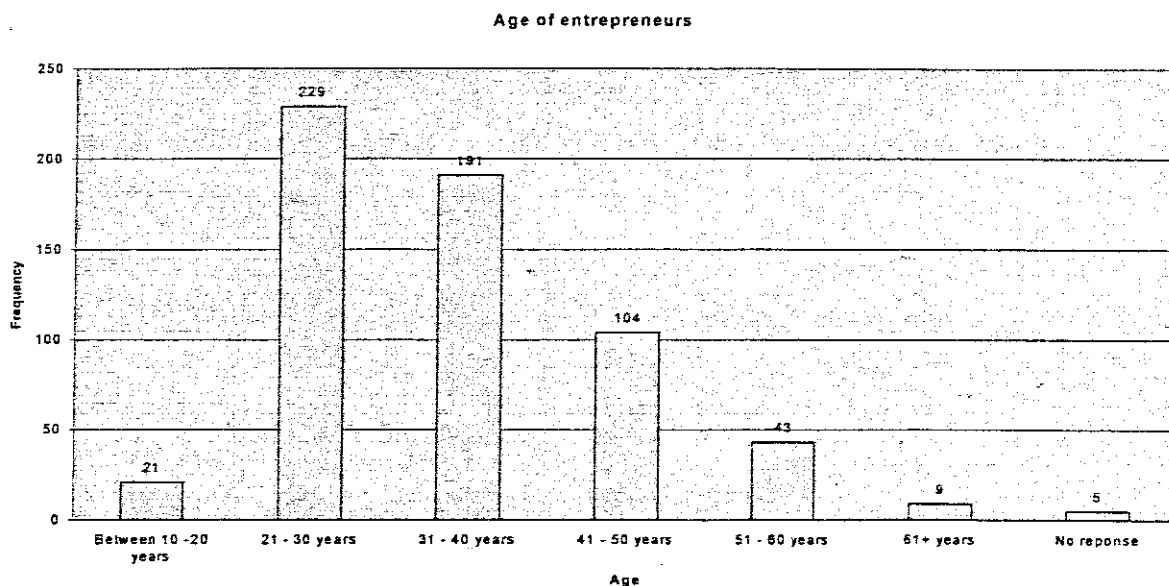


Fig.3. Age of Entrepreneurs

The highest concentration 229 (38%) was found in the age range from 21-30, followed by the age bracket 31-40, 91 (15%). Other categories were the age group 41-50, 104 (17.3%), between 51-60 years, 43 (7.1%), while those below 20 years of age were 21 (3.5%). This is an indication that children are involved in the informal sector. Senior citizens, a category that includes people of age 61 and above, were 9 (1.5%) in number.

Those who did not indicate their ages were a negligible 5 (0.8%). Most likely these are people who do not know their ages or who know their ages by phenomenal calendars, that is in terms of moons, or seasons or any tangible event (like famine, flood, war etc.) that could have been prevalent at the time of birth. They are therefore unable to specify their age. It could also mean that they are illiterate.

7.2.2 Education

It is a presumption that the number of years of exposure to education and the skills acquired the owner can contribute significantly towards the wellbeing of a business. Based on the assumption that education is well used, people are expected to be more productive in their work places. The success of a worker, or in this case an entrepreneur, would depend on the depth of education obtained and the degree to which an individual can adapt or apply the knowledge acquired to specific conditions. It is further recognized that lack of sufficient education of the entrepreneur could be an impediment to the growth and development of an enterprise, due to poor knowledge being applied to the business.

The study established that the highest educational attainment among respondents was university education, 22 (3.7%) and technical college education 70 (11.6%). However, the largest proportion 226 (37.5%) had completed primary education, followed by 199 (33.1%) who had secured or completed secondary education. Those who never went to school were 44 (7.3%). A small category, 19 (3.2%), had been to other post secondary institutions such as private commercial or business colleges. Others 14 (2.3%) could have migrated from other professions like the police, army, church etc. The non-response rate

was 8(1.3%). This could have been caused by shyness to disclose illiteracy or shamefulness for other reasons.

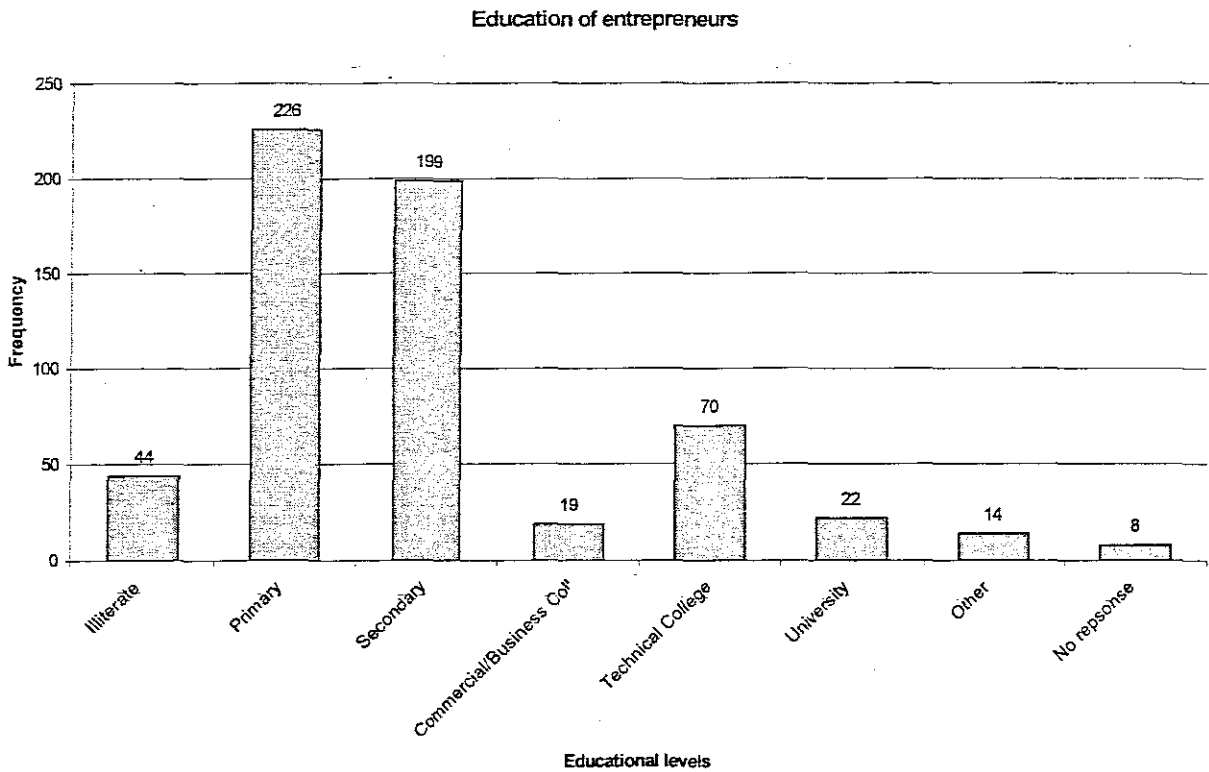


Fig. 4: Education of entrepreneurs

7.2.3 Occupations

It has been noted by other studies that the informal sector comprises such a diversity of situations and activities that it represents a heterogeneous universe (Portes, Castels & Benton 1989:15, 27). Table I summarizes the identified occupations.

Table I: Sample of occupations (N=602)

Occupations	Frequency	Percent
Food processing	179	29.7
Metal work	74	12.3
Arts & Crafts	61	10.1
Construction	54	9.0
Woodwork	43	7.1
Social services	31	5.1
Tailoring	30	5.0
Technical services	31	5.1
Garage work & transport	18	3.0
Shoe making, shining & repair	17	2.8
Trade (Retail)	16	2.7
Off-the-Farm Activities	16	2.7
Traditional Birth Attending (TBA)	10	1.7
Others	13	2.2
No response	10	1.7
Total	602	100.00

Table I shows only major clusters of occupations. Within most trades, there are several activities, for example, food processing that includes grain milling, wine making, food vending, eating-houses, processing of nut pastes etc. The clusters attempt to aggregate occupations along the International Standards Organization classification outline and Government of Uganda listing. A list of occupations is shown in Chapter Two, section 2.4.1.

7.2.4 Acquisition of skills

In view of the uniqueness of certain jobs, specific skills are required before someone is able to perform them. This means an enterprise might wish to employ only people with previous experience in that trade. If not, they might employ people but train them on the job. This kind of labour is expected to be more productive in the short run. Skilled labour is expected, if deployed appropriately, to be more productive. This depends on the level and depth of skills attained and the matching of these skills to appropriate types of jobs. Not surprisingly, more than half 362 (60%) of the entrepreneurs acquired their working skills through experience. That means they did not have prior training. Nonetheless, 124 (20.5%) had received some formal training, 101 (16.8%) acquired skills through apprenticeship, while 28 (4.6%) attained them through both formal training as well as apprenticeship. Others, 6 (1%), did not specify their qualifications. The non-response rate was only 3(0.5%). Evidently, most entrepreneurs gain their training outside the formal education.

7.2.5 Languages

Fifty-six indigenous languages are recognized and spoken in Uganda (Uganda Constitution 1995). English is the official language while Kiswahili is the national language. This reflects a cultural diversity of Ugandans. Languages trace a fascinating story of human interaction in all activities including the informal sector, and are the natural media for communicating information. Of interest to this study was the need to reveal the languages of discourse among informal entrepreneurs in order to see whether they form part of the mainstream languages for information provision in the country. The English language is used for information provision in the public sector and to a large extent in the formal private sector. Kiswahili is mostly used in the police and army. In commerce, local languages are dominant and, to some extent, Kiswahili. Two important considerations with regard to language(s) in this study were whether an entrepreneur could read and write well and the languages that could be spoken and understood in ordinary conversation. It was recognized that non-literate persons could not communicate with regard to reading and writing while literate people could possibly do well in both. It

is also common knowledge that many people can learn to use languages without necessarily studying them.

The findings indicate that entrepreneurs use both English, a foreign language to them, and Kiswahili, which is a popular regional language. Language proficiency is or can be attributed to the environment where one lives or works. To validate this, from 602 entrepreneurs interviewed, 1064 responses were received. This large number of responses is attributed to the fact that at least entrepreneurs are able to understand and use more than one language. English was read and written by 272(45%), Kiswahili was used by 75(12.5%), Runyankole by 266(44.2%); Luganda by 239(39.7%), Ruchiga by 122(20.3%), Lunyoro by 46(7.6%), and Luo by 44(7.3%), while other languages were also noted. The calculation is based on 602. The point is that an illiterate person cannot write in any language. The second point is that a mother tongue in a particular district prevails over other languages. It was also noted that most people are able to speak and write in more than one language and that there was no dominant language. Uniquely, although Kiswahili is a national language, a small percentage, 12.5%, were able to use it for communication. Furthermore, foreign languages, including French, Arabic, Nubi, Lingala, Lendu, Kikuyu, Reru, though used by insignificant numbers of people, are spoken in the informal sector in Uganda. This indicates that the informal sector transcends many nationalities such as the Congo, Sudan, Kenya, and Rwanda.

The majority 337 (56%), of people interviewed preferred speaking English, while 281 (46.7%) spoke Luganda (an indigenous language), 222 (36.9%) used Runyankole (also an indigenous language) and only 156 (25.9%) used Kiswahili, a popular East African language spoken by the majority of inhabitants among many other languages. The opinion was formed that people, when conducting informal business, are mostly comfortable with indigenous languages. It may also be suggested that they are not competent in the official language used by government and other agencies to transfer information, or in Kiswahili, the national language.

7.2.6 Type of worker

Reasons for the study's interest in establishing the status of workers included the fact that owners of informal enterprises often play the dual role of employer and employee, due to the smallness of the business operation. The business reason for this could be that the burden of making money requires one to attend to the job all the time. Not surprisingly, more than three-quarters 489 (81.2%) entrepreneurs were fulltime or regular employees. Of the entrepreneurs interviewed, 104 (17.2%) were working part time, while 11 (1.8%) were working on a casual basis.

7.2.7 Duration of employment

A large number, 217 (36%), of the employees had been in business for five years or less, while 181 (30.1%) had been in the occupation for up to ten years and a lesser number, 106 (17.6%), had spent up to fifteen years in this occupation. Beyond this, another 43 (7.1%) had been in the sector for between 16-20 years while those with twenty years and more experience were 51 (8.5%). These findings are very interesting in the sense that they show the trends of the development of the informal sector in Uganda. The situation of the informal sector had already become an important issue in Uganda as long ago as 1972. This was the time when former President Idi Amin sent away Asians and allocated businesses to ill-equipped Ugandans. The effect of these actions was the failure of the economy to sustain the needs of the people. As a result, the informal sector surfaced to supplement the decaying private and public sector. Therefore, the findings highlight the mismanagement of the country during that time.

7.2.8 Status before joining the Sector

It is always assumed that the informal sector absorbs people who cannot find employment elsewhere. It was therefore curious to find out what the entrepreneurs were doing before joining the sector. Findings show that many of them, that is 238 (39.5%), were attending school, 126 (20.9%) were employed in the civil service, 54 (9%) were employed in the private sector, while 53 (8.8%) were land cultivators. Interestingly, 27 (4.5%), said they were doing nothing. Perhaps they were dependants (women and

children). No response was received from 25 (4.2%). The findings show that most informal entrepreneurs belong to the youthful category of the population. It also shows that people are beginning to appreciate the informal sector as a self-help venture. This is particularly seen in the context of the highly educated.

7.2.9 Alternative business from the informal sector

The study also found it necessary to ascertain whether those employed were engaged in some other business besides informal employment. Findings showed that almost two-thirds, 388 (64.5%), did not have alternative employment, while 212 (35.2%) had another business. There is therefore evidence that people do other things to make ends meet using different ways and, that family support is available to attend to other business.

7.2.10 Reasons for joining the Informal Sector

Survival was found to be the most common reason for *joining the informal sector*. More than half, 325 (54%), became involved for the income generation and profit they expected to gain. Just over one hundred, 102 (16.9%), said that they were looking for gainful employment, another 77 (12.7%) were seeking means of training and gaining experience, 59 (9.8%) were absorbed into it by peer influence, while curiosity and ambition was also cited among 36 (5.9%) of these people. Twenty (3.3%) reported that the market required their skills. Others joined for different reasons, such as insecurity in their home areas, extended family problems, lack of school fees to continue schooling, and the influence of traditional beliefs, while some said disaster created a need to do so.

7.2.11 Sources of income

The study found that informal, fulltime entrepreneurs were sometimes forced to engage in other informal enterprises other than their present trades in order to supplement their income.

7.2.12 The present trade as major is source of income

To follow on what is stated above, it was important to find out whether the present trades were the entrepreneurs' major sources of income. It was found that 525 (87.2%) said it was, while the remainder, 71 (11.8%), said they had businesses that were more important than informal businesses. Then they- the 11.8% - could not be considered to be informal business entrepreneurs. Only 6 (1.0%) did not respond to this question. This finding is an indication that people find the informal sector to be a major source of income.

7.2.13 Factors influencing involvement with the Informal Sector

The study also sought to find factors that motivated and demotivated individuals in the informal sector. Beginning with motivating factors, 776 responses were received from the 602 entrepreneurs. The reason for a larger number of responses than the total number of respondents is that some respondents gave more than one answer. The outcomes indicate that 352 (58.5%) said they were motivated by income and profit while 222 (36.8%) mentioned that there was a market for their products and that this is what motivated them to stay on. Access to training in the sector was mentioned by 51 (8.4%), availability of inputs was stated by 46 (7.6%), while 45 (7.5%) said that the sector provided them with employment opportunities. Sheer interest was expressed by 20 (3.3%). Others mentioned factors such as having the necessary skills to continue in the sector. They also said that little capital was needed to continue in the trade, the feeling of prestige or recognition and the conviction that they were earning a fairly good living were other factors. There was therefore a lack of fear of being jobless while earning a small but steady income. The fact that it was not necessary to obtain a license, and the favorable conditions (such as security etc.) were also cited as reasons for remaining in the informal sector. Only 10 (1.6%) failed to respond to this question.

Regarding demotivating factors, 939 responses were received from the 602 entrepreneurs. Again this was an indication that some respondents gave more than one answer. It also means that more than one problem was being faced by most of them. The demotivating factors stated were lack of markets for their goods, cited by 196 (32.5%), difficulties in

securing inputs required for production 194 (32.2%), poor health 113 (18.7%), heavy tax burden 79 (13.1%), and better employment opportunities elsewhere 43 (7.1%). It was furthermore mentioned that there was job insecurity 40 (6.6%), and 67 (11.1%) mentioned poor working conditions, high transportation costs, meager profits or income, competition, drought, high overheads, poor supervision, debtors, and [harsh] government policies. Other demotivating factors included natural hazards, seasonal harvest (fishing), high interest on loans, thieves and pirates (fishing) and poor public opinion. About 78 (13%) percent did not respond.

7.2.14 Government involvement in the informal sector

It is argued that the informal sector in most cases is out of government control (Maliyankomo & Bagachwa, 1990). But this is not the case in Uganda. The official Ugandan Government position is that, given the need to deploy the retrenched persons from the public service and taking into consideration the normal increase in employment requirements, the informal sector is likely to play an increasing role in providing gainful employment to large numbers of entrants to the labor market (Report of the Public Service Review and Reorganization Commission [PSRRC] 1990:95). This official position suggests that the Government recognizes the importance of the informal sector. What the findings show is consistent with the Government position. Almost three quarters 445 (73.9%) indicated that government was involved indirectly with the informal sector's activities. One quarter, 152 (25.2%) said that the government did not involve itself in their activities, while 5 (0.8%) did not respond.

Government involvement was found in extension services, taxation, licensing, offering tenders/contracts to the sector, looking for markets for certain goods such as fish, constructing roads to fishing sites and development of landing sites. Its involvement also includes buying goods from the sector, training and restraining informal workers from indulging in certain activities, such as entering forests to search for herbal medicine, thereby destroying trees, and confiscating inputs like charcoal, fishing nets etc.

It was therefore essential to find out how interventions affected the sector. Respondents in general viewed this in two ways. One way was positive. They felt that the government provides security in fishing areas, training, they request tenders and buy goods, drill boreholes to provide clean water, and construct roads to fishing sites. The second viewpoint was negative. Respondents in this category pointed out problems with taxation, and that certain restrictions were harsh. Paying tax was acceptable because it is a constitutional obligation but the way in which the tax collectors implemented this obligation created animosity and resistance to pay.

7.2.15 The life span of the informal businesses.

The opinions of the respondents based on their experiences and knowledge was required for this section. The underlying reason for this is that in some studies, it is said that informal sector activities are fragile and underdeveloped (Snyder, 2000:8; Kuteesa, 1998:2). It is believed that many operations die off as soon as they are formed. This is partly because of the nature of investment and partly because the informal sector is considered by some as a holding ground for entry into the formal sector. On the one hand, there are not many jobs in the formal sector in Uganda anymore. In fact the public service is shrinking all the time. Even in the private sector, modern and global production methods are dependent on technology and very highly skilled labor, which is scarce. On the other hand, most informal entrepreneurs have a low educational background and some none at all. Against this background, the findings in this study appear to show the contrary view. Most respondents, 550 (91.4%) said their activities were of a lasting nature, while only 46 (7.6%) registered a negative viewpoint. Only 6 persons (1%) failed to respond to the question. The majority stated that they knew that they had no other place to go to and that their jobs in the Informal Sector were their first and last place of employment. Most informal enterprises begin with high motivation, which makes them thrive up to a given, critical time. After that time their momentum decreases rapidly. Direct observation reveals that entrepreneurs often do not stick to their original line of business, for example, a handyman may find it more lucrative to specialize in a field of work, such as plumbing.

Those who feel that informal enterprises do not last long, enumerated various factors causing them to close down soon after they have started. Among these were: exhaustion of inputs, poor health, better alternatives, natural hazards, insecurity, changes in (harsh) government policies, competition, and high taxes.

7.2.16 Cultural dynamics

Culture is the dominant set of behaviors, values, beliefs, customs and thinking patterns that people learn as they grow and develop in society. It determines how they view others and themselves, how they behave, and how they perceive the world around them (Smith, 2000:4). Understood in that context, the study was optimistic to examine informal workers views, that is, their beliefs and customs, if any, about their activities in the informal sector. The aim was to establish the cultural characteristics of the informal sector. A further objective was to examine beliefs, customs, opinions and influences of the informal sector on the lives of Ugandans who are entrepreneurs in it.

Beliefs attracted unique answers. In the first place, two types of beliefs were identified, religious beliefs and the secular or profane beliefs. Religious beliefs are anchored in the Holy Spirit or Holy Ghost. Others are unique beliefs that people experience and follow as they go on in life. Findings indicate that more than half, 272 (45.2%) people are of the opinion that there were beliefs observed by them, 212 (35.2%) did not respond, and 118 (19.6%) said there were no beliefs inherent in informal business. Presented here is an aggregate answer. The following are some of the informal beliefs: an owl perched on the roof of a house at night is a sign of bad omen. Others believe that working in the informal sector brings about exhaustion of the mind and reduces one's life span. Others believed that the informal sector provides employment, and that opportunities are God-given, or that God gives and God takes (people who are religious have this belief). Informal activities are easy to carry out, they are a source of income, and a source of medicine (beekeepers, and herbalists said this). Herbalists believed that they, for example, could not go out to look for medicinal plants after sexual intercourse. Traditional healers, for example, believed that one must wear a back cloth when healing somebody and that

women are forbidden from going to Lake Victoria (Ssesse) Islands. Fishermen, for example, believed that sheep are not to be taken to the islands in Lake Victoria. They also believe that there is a spirit governing particular landing sites on Lake Victoria, such as the *Kasiru* landing site, where women and sheep are forbidden, as they are on Ssesse Island. They believe, and state that it is their experience, that heavy storms that last for several days develop if this taboo is broken. They also believe that the *Mukasa spirit* governs lakes or fishing activities and that the spirit is the owner of the lake. In case of death on the lake, they say that the ancestors have come after their son(s).

Other beliefs are found among other people working in different trades. For example, those working with electricity say that electricity drains blood. This belief is probably based on the experience of electric shocks. Others state that work in the informal sector is reserved for the poorly educated or non-educated. What can be said here is that people have different ways of perceiving the world around them. It is one of the mysteries of the world that human beings were made to understand what goes on around them. Anything unexplainable enters the realm of metaphysical science. Psychologists would probably be able to better explain the basis of such beliefs.

It was also important to determine entrepreneurs reacted to beliefs. Almost half, (252) or 41.9% of the 602 respondents, did not respond to this question or were ambivalent, 205 (34.1%) considered beliefs as very important, 94 (15.6%) said they were important, 16 (2.7%) said they believed in them as somewhat important and 35 (5.8%) did not attach any importance to beliefs. The overview is that more than half, 305 (50.6%) considered beliefs as important to them. The extent of believing in them was also tested. It was found that 120 (19.9%) firmly and fully believed in superstitions or popular beliefs, 145 (24.1%) believed to a great extent, and 44 (7.3%) only to some extent. Almost half 262 (43.5%) did not respond and 31 (5.1%) did not believe in the validity of any such beliefs. The large number that did not respond to the question could be attributed to the fact that culture is something that many people, especially the young, no longer understand. It is not practiced widely. The would-be practitioners, especially the elderly, have either died or are too few to influence the younger generations. Influence of education and modernity

has also had effect on peoples as well as indigenous cultures – so that there is little of the old cultures left. This is very sad.

Like beliefs, customs are rooted in society. An aim of the study was to investigate whether there were any customs that are also observed in the informal sector. Quite surprisingly, this question was not fully answered. Those who said, ‘Yes’ were 119 (19.8%), while 245 (40.7%) said ‘No’ and no response was received from 238 (39.5%). *The opinion given here is constructed from the sample itself, namely: since most of the population in the sector are young and have attained some education, influences of modernity have led to a loss of their original culture. The influences of education and religion as well as modernity have a significant impact on the loss of local values. Young people seem to shun most of the customary values. For example, wearing a *juju* or *talisman* in the pocket or amulets around the neck of a child to ward off evil is one of them. Performing a cultural ceremony on a new boat to appease the gods of the lake or to ward of thieves are some of the beliefs or customs that are not upheld by the youth. Those who used them argued that customs were important during the naming of newborn children, birth of twins, marriage, as a source of medicine or source of wealth. For example, shea nut butter was used in rural areas in northern Uganda as an ointment for women and children. It is also used during postnatal ceremonies, for anointing the mother and the new baby. The story of Jesus’s childhood is reflected here. Pots with two mouths are widely used in rituals when twins are born. If the twins die at birth, they are buried in such pots, but not these days. Certain crafts and musical instruments were used in traditional marriages and dances as a source of music. It can be stated that while there are some customs that are progressive, others are retrogressive. An example of a retrogressive culture is the practice of praying around the hill near the lake to call fish back!*

In the course of finding out more about community views of the informal sector, an inquiry was made into the use of remains or artifacts. Answers were varied, but it was found that, in general, the artifacts were recycled. For example, blacksmiths use scrap iron but some bits of unusable scrap always remains. Blacksmiths sell them to the formal

sector involved in steel rolling, which makes economic sense. Fishermen have old boats and oars. The group uses them for repair of other boats or take them home and use them for domestic fuel. This is also sensible. Garages have items such as engine blocks, crushed bodies of cars and wheel rims, which are sold to the *Jua Kali* blacksmith for the production of new goods. Potters have remains of broken pots. These are recycled as “yeast” or raw material for making new pots and some are recycled for administering local medicine to the sick. Most interestingly, there were almost no artifacts in the processing of medicinal herbs. It was reported that the herbalists (indigenous pharmacists) never get excess medicine from the source (forests). They know how much is required for a certain period and make arrangements to replenish stocks as the old stock is depleted. If there were old stock remaining, most likely rats would have damaged them by eating parts of the herbs, in which case they could no longer be used. Grain millers, hold equally unique beliefs such as that when a new mill is installed, a sheep has to be sacrificed to appease the “gods” so that nothing goes wrong with the mill. Those who grind maize, leave behind the maize cobs. Unfortunately these are burnt. New information that was gathered during fieldwork was that cobs are used as raw material for making paint in developed countries. The respondents did not know this. The researcher has no proof of this either but came across information from USSIA representative in the Masindi District. Rice hulling left behind husks. It is believed that husks can be used for making compressed bricks. This, they noted, is done in India. Ugandans have not yet done so. They burn them instead. Coffee processors also burn the husks. New research has shown that these are useful for energy. Beekeepers used to throw away wax but now they realize that they can sell it for candle and shoe polish making. There is a lot of sense in all these. In brief, artifacts of the informal sector have value in one way or the other. It needs more research to put these together in order to explain what each artifact is good for.

7.2.17 The influence of the Informal Sector on Entrepreneurs

Respondents have already indicated that being in the informal sector is good for them. But how influential is the sector in their lives? A summary of findings indicates that almost three-quarters of the respondents 461 (76.6%) recognize the informal sector as an

entrepreneurial sector for self-sustainability, while 48 (7.9%) said they got satisfaction, recognition and prestige by being actively involved in the sector. In addition 25 (4.1%) said they were able to gain the necessary training and experience required to fit in the job market within the same sector. Eighteen (3%) stated that they gained popularity. Perhaps what this means is that the products that they made and sold and the prices at which they sold them were within the reach of their customers. Some of them, that is, 19 (3.1%) said that they were employed in this enterprise. Others 38 (6.3%) said that the informal sector enabled them to fight poverty, to socialize, to make friends, saved them from stress, and enabled them to become independent. Furthermore, the informal sector helped them to get income, provided that they worked for it. It therefore improved their living standards, and it was a cheap source of satisfying domestic needs. It was also considered as a way of solving domestic problems concerning food, fees and marriages.

7.2.18 Comparison with the Formal Sector

This question was restricted to five areas and had scaled answers that varied from “not important” to “most important”. The overall picture is that the informal sector is essential to its practitioners. Almost half 281 (46.7%) of the respondents said it was very important, 139 (23.1%) rated it as important, 99 (16.4%) indicated it as most important, and 36 (6%) said it was important. Those who considered it not important were 29 (4.8%) and those who did not respond were 18 (3%). Considering it a little further from the viewpoint of those who said it was important, it can be stated that persons who were retrenched, or those who have never been employed in the formal sector have no grounds for saying that the informal sector is not important. All that they know is the informal sector and for that reason it is very important to them.

7.3 Characteristics of business units

This section covers research question number two and aims at establishing the business characteristics of the informal sector. In order to attain this aim, it was necessary to determine the status of business units, gender of persons operating in the business, leadership in business units, type of business activities, products, types and sources of

raw materials. There was also a need to establish employment levels and the genders of people involved in them, the customers, the labour time per day and per week, the location of business units (whether rural or urban), the infrastructure in businesses, hygiene conditions of the business sites, and the age of business units. Furthermore, it was important to find out if informal entrepreneurs paid tax to the government in the form of licenses or other fees, and whether they kept records or not. It also sought to find out sources of capital, how much these people earn on average per day and month; and the nature of the customers.

7.3.1 Status of business enterprise

A business organization can fall in the category of a single proprietorship, a partnership, a limited company, or a cooperative. It can have a unique characteristic of being a family business without demarcation, whether it is a sole proprietorship or partnership. The nature of ownership of an enterprise is an indicator of size, capital input, and degree of specialization. In this study it was found that more than half 392 (65.1%) were sole proprietors, 111 (18.4%) were partnerships, 63 (10.5%) were family owned, 15 (2.5%) were limited companies, 7 (1.2%) were found to be cooperative societies. Others were loosely formed alliances. No response was received from 5 (0.8%) of the respondents.

7.3.2 Gender of persons operating business

Gender is about males and females. The informal sector is a business sector. The purpose of this section was to establish the extent of involvement of either sex in the informal sector. Other studies (Snyder, 2000; Republic of Uganda, 1999) state that females are found more often in the informal sector than males. This study is not aimed at measuring the aforementioned aspect but at showing the relative participation of women in the sector. It is revealed in this study that male-headed businesses dominated the trades and accounted for 451 (74.9%). Those businesses that there were headed by females were 101 (16.8%) and 36 (6%) of the respondents stated that their businesses shared leadership. This could be a case of a partnership with equal shares. The study does not intend to rush in to say that there are more males than females or vice versa in the informal sector.

Female respondents, especially those who were married, were located far in the countryside and could therefore not be interviewed easily. Some women preferred that their husbands be interviewed instead. It is also important to note that there was about one quarter of females in the study. They could have been more.

7.3.3 Management positions in business

This was a closed question requiring knowing whether someone was an owner, a manager, partner/shareholder, employee or director. Findings indicate that the majority, 399 (66.3%) were owners, 67 (11.1%) were in partnership shareholdings, 59 (9.8%) were employees, 49 (8.1%) were found to be managers, and 17 (2.8%) were directors. No response was received from 11 (1.8%).

7.3.4 Types of business activity

It is often stated that the informal sector is complex and heterogeneous. This question was asked to prove or disprove that notion. By establishing its composition, which is covered in Chapter Two, section 2.3.2, the study shows that the sector is heterogeneous. The list shows the activities arranged according to major clusters and within each cluster, sub sectors are indicated.

7.3.5 Products

As indicated in the preceding section, products of the sector are as varied as there are activities and inputs that are needed to produce products. It was important to note that entrepreneurs obtained almost three-fourths (425) (70.6%) of their inputs from within their districts, (144) 24 % obtained them from Kampala City, while (33) 5.5% secured them from outside the country. It must be added here that those that were obtained within their areas were from the environment or from the shops. For example, firewood for smoking fish, papyrus and palms for mat making, clay for pots, sisal for ropes, sheanut trees, medicinal plants or herbs, bees etc. were all from within their environments or forests. Salt, nets, sacks, lines, and engines were purchased from the shops nearby or from Kampala City. Blacksmiths looked to garages for crushed vehicles.

7.3.6 Types and sources of raw materials

Informal enterprises are established to satisfy the needs of individual consumers and households rather than to meet the needs of the mass market. This explains why they are small. They enter niches where the formal sector does not consider economic engagement. Most of the enterprises covered bought their raw materials from households and individuals, as well as from other small enterprises. Metal workers and some blacksmiths using cold metal obtained their materials from the formal sector. For example, these include steel plates, iron bars, angle iron, hollow sections etc. Blacksmiths using hot metal relied on scrap brought to them by individuals and sold by garage owners. Traditional craft makers save for buying colouring matter which is imported from Kenya, brick-makers, charcoal burners and herbalists secure their inputs from the swamps or forests. Food processors obtained their materials from the markets, their gardens or homes. Poultry and pig keepers relied on shops for feeds or drugs. Tailors got cloth from shops or used rags for repair from owners. Stone quarries relied on the rocks wherever they were located. But what is significant is that there are linkages with the formal sector.

7.3.7. Human resources

One of the peculiarities of the informal sector is that there is a limited division of labor. Because there are not many employees in the firm, one worker usually performs many tasks and functions (Fapohunda, 1985) and yet he/she is the owner at the same time. It was imperative to get an idea about how many people were employed per enterprise. The idea stems from what is in the literature, namely that informal enterprises in most cases employ one or two, or three people mostly. At times family labour is utilized. Findings confirm that most informal businesses actually employ a small number of people per enterprise. In this study more than half were micro units or very small enterprises (VSEs). For example, more than half, that is, 369(61.3%) employed up to 3 persons each, 102 (16.9%) employed 4-6 people, 37 (6.1%) employed 7-9 people, and 10 employees and above employed 80 (13.3%). These findings concur with Fapohunda's (1985) findings on the Informal Sector in Lagos, Nigeria.

7.3.8 Customers

Four possibilities were expected, that is, that customers would consist of private individuals, Non-Governmental Organizations (NGOs), government departments, and companies. This question was important because the informal sector is said to stand outside of government control. It is supposed to be a sector that escapes taxation, which means that it is unregulated, and disorganized. The Government, therefore, cannot be its customer. As it turned out more than half of the total number of entrepreneurs participating in the survey, that is, 577 (95.8%), were found to be private individuals. They form the traditional market. The next 172 (28.6%) were NGOs, and significantly government departments were represented by 138 (22.9%) while companies had a share of 123 (20.4%). Seven (1.2%) did not respond.

7.3.9 Working times

This question was asked to form a comparison between government employees and informal sector entrepreneurs. In the formal sector, employees worked for at least eight hours a day, five days a week. They normally worked for 40 hours a week, and where people worked over the weekends or holidays, suitable arrangements had to be made (or extra payment made) as a matter of policy. The study found that at least close to half, or 284 (47.2%) of the informal entrepreneurs, worked slightly more than the employees in the formal sector. They worked for between 9 to 12 hours a day. Two hundred and thirty eight (39.5%) worked like public employees, that is, up to 8 hours per day. Fifty-two, (8.6%) worked far more, that is, between 12 to 18 hours. The number that did not respond stood at 27 (4.5%). These could not compute real time spent. What this means is that in the informal sector, working times are flexible. There are no fixed working hours. Consequently the businesses operate in a manner that is convenient to the owners.

Taking this on a weekly basis, it was found that 307 (51%) respondents worked seven days a week as against five in public service, 238(39.5%) worked irregular days, and 50 (8.3%) worked like public servants.

7.3.10 Location of business

Location is an important consideration for a successful business not only because it requires space to operate from, but also because certain locations are better than others in terms of customers or sources of raw material. In this context, two locations were considered, rural and urban. Most urban enterprises are located by the roadside. For the purpose of this study, lakes and rivers are considered to be located in rural areas. The findings indicate that almost three-fourths 427 (70.9%) were located in urban areas, 161 (26.7%) in the rural areas and 4 (0.7%) were located in both urban and rural areas. No response was received from 10 (1.7%). It was further found that in general, informal sector establishments had fixed spaces or locations from where they operate.

7.3.11 Infrastructure available for business

The literature (Bedini & Masera, 1999, University of Sierra Leone, 1991) available on this subject indicates that informal enterprises are worse off in terms of infrastructure. Benchmarks used are the existence of electricity, running water, shelter, accessibility to transport, life support facilities, etc. The picture that emerges from this question is as complex as the number of businesses encountered. This is because there are many variables that relate to infrastructure. A summary of the findings indicates that 304 (50.4%) are accessible to transport. Those operating in the open air accounted for 258 (42.9%), those with permanent premises were 191 (31.7%), while 109 (18.1%) operated in semi permanent structures, 89 (14.8%) operated in temporary structures and 69 (11.4%) operate under trees. In terms of power supply, 164 (27.2%) had electricity, and 112 (18.6%) had running water. Mobile groups consisted of 14 (2.3 %), according to the findings. In another category, it was found that some people operated in both open air premises and were permanently or semi permanently located under trees and at the same time having stalls in which to keep their items. However, it can be said that in general the sector lacks a dependable infrastructure and social amenities.

7.3.12 Hygienic conditions of workplaces

Observing proper hygiene is a pre-condition for improved performance. It liberates

individuals from work hazards, and time taken outside work. This question had a rating scale from good, fairly good, to bad, and very bad. Since this question was put to individuals, the study had to report what was said. It would have been difficult for someone to admit that his workplace is very bad, as this would seek further clarification as to why one would insist on working in squalid conditions knowing very well that it is bad. In this study the respondents, in general, said that their hygienic conditions were fairly good, with almost half 298 (49.5%) indicating this. About one-third, 216 (35.9%), indicated that it is good enough, while 68 (11.3%) actually admitted that it was bad. Only 3.3% had no idea of what is meant by good or bad. For them it was an acceptable working environment, given the existing circumstances.

7.3.13 Number of years in business

The rationale behind this question was to find out whether what has been reported in other studies is true or false, namely that informal sector businesses are fragile, and that they do not last long. The claim is that they die off as soon as they are formed, which is after not more than 5 years. Findings show that there is some truth in this claim. Of the 602 businesses, 231 (38.4%) had operated for up to five years, which is an indicator that they were actually young and still fragile. The next 167 (27.7%) businesses had been in existence for up to ten years, 91 (15.1%) survived up to fifteen years, 55 (9.1%) were mature because they had existed up to 20 years while those that had existed beyond 20 years were 54 (9.0%) of the sample. No response was received from 4 (0.7%).

7.3.14 Business license

One of the important elements in business organization is the presence of a business license. In the sample of entrepreneurs interviewed almost two thirds, that is, 385 (64 %) said that they do have business licenses. One hundred and ninety (31.6%) did not have any. There was no response from 27 (4.5%). It is stated here for clarification that there are different types of licenses for certain activities in the informal sector. For example, in the fishing sub-sector, there is a license for fishing as an activity. There is a permit for a boat. There is a license for trading in fish; there is a fee for a landing site and so on. In

this context one person could have many permits or licenses. However, having a license depends on how close a business is to government officials, where it is located and how active tax men are in dealing with the business people. Records are actually useful documents for tax assessment and renewal of licences.

7.3.15 Business Records

One important aspect of business management is the keeping of records including financial records. The non-keeping of records could imply an inability to measure the profitability of business with any degree of accuracy. This makes most of the accounts and activities to depend on the memory capacity of the entrepreneur. Evidently this limits the extent to which the business can expand or the way in which information is exploited. It will not show easily the difference between capital investment and gross output. Nor will it give an idea of the balance sheet of the business enterprise. Findings indicate that the position is almost in balance. Those who kept books accounted for 343 (57 %) and those who did not were 249 (41.4%). There was no response from 10 (1.7%). The figures reflect certain characteristics such as levels of education, the nature of their occupation, attitudes, and level of production etc. For those who did, it was necessary to confirm the types of records kept. A pre-determined list was given from which to identify types of records that were kept. The findings show the following:

- Purchase records, 250 (41.5%)
- Sales records, 241(40%)
- Debtors records, 229 (38%)
- Customers records, 200 (33.2%)
- Labour records, 177 (29.4%)
- Payment records, 167 (27.7%)
- Banking records, 148 (24.6%)
- Business activity records, 106 (17.6%)
- Inventory records, 66 (11%)
- Business associates records 30 (5%)

- Other types of records 6 (0.9%)

There was no response from only 1 (0.2%) person.

The picture that emerges is that there is some record keeping in the business. Secondly, records kept most frequently were purchase, sales and debtors records, while records kept less often were ones concerning business activity, inventories, and records reflecting associates, etc. The findings also confirm that there is a low division of labour, which explains why labor records and payment records, are low in the hierarchy. It also confirms that Banking is low, an indication of low capital or use of “house Banks”.

Similarly, it was important to find out why others, 249 (41.4%), did not keep records at all. Quantified responses showed that 112 (44.9%) found it unnecessary, 84 (33.7%) trusted their memory, 57 (22.9%) said they earned little and therefore did not see the need to keep records. Those who did not bother to do so numbered 56 (22.5%), those who did not have time to write and keep books were 17 (6.8%), the completely illiterate were 9 (3.6%), while 1 (0.4%) did not want revenue authorities to know what he/she was earning. Others, 5 (2%), did not keep records for other reasons. No response was received from 7 (1.2%).

7.3.16 Initial capital

Initial capital is an important factor for any business. Land, raw materials, knowledge and skills are other forms of capital that are also needed. The large majority, 501 (83.2%), indicated that they opened up their business using personal money. Another 50 (8.3%) said that they borrowed from friends. 37 (6.1%) stated that they got money from relatives. 20 (3.3%) secured a Bank loan. 12 (2%) accessed money from partnership savings. 9 (1.5%) received grants from NGOs. 3 (0.4%) secured loans from Government scheme and another 3 (0.4%) got capital from credit purchase. The remaining 25 (4.2%) said they got it from a salary, while some said their businesses did not require initial capital, and others inherited money from their families.

7.3.17 Income dynamics

Part of the peculiarities of the informal sector businesses is that some of the labour is paid for whilst some is not. Payment could either be in cash or in kind or both. Another peculiarity is that labour is actually relatively cheap. To establish income dynamics, it was expedient to find out the amount of earnings received per day and per month. Much as this could be a controversial area with deceptive results, the respondents, nevertheless, gave their figures as follows. In the daily earnings category, over half 415 (68.9%) were actually getting between US \$1-10, 90 (15%) were a little better off, that is with earnings of between US \$10-30, 28 (4.7%) were getting between US \$30- 50, and 22 (3.7%) could earn between US \$50-100. Earnings above this only amounted to 2%. Interestingly 35 (5.8%) did not respond to this question. It is most likely that they do not know how to count, are illiterate, or do not like to disclose their personal earnings. This finding indicates that earnings per day are very low for the majority of the people. Nobody admitted that they were paid in kind although it happens.

Considered on a monthly basis the picture changes somehow. Distribution is more widespread. Those worse off were 93 (15.4%) who earned between US \$10-20, while 109 (18.1%) earned US \$20-50. One quarter, 153 (25.4%) were found to be getting between US \$50-100, 102 (16.9%) were getting between US \$100-200. 63 (10.5%) were in the range of US \$200-500. From this point upward, the scale skews very sharply upwards. Only 27 (4.5%) were able to get between US \$500-1,000 and 33 (5.5%) were the super class of the informal sector. No response was received from 22 (3.7%). The indication is that the informal sector income compares fairly well with the Formal Sector from the range of US\$ 50 upwards.

7.4 Information needs and information seeking in the Informal Sector

In section 7.3, the nature, type and characteristics of the informal sector entrepreneurs are described. In this section the informal entrepreneurs' information needs and information seeking behaviors are identified and presented. It is the section that provides answers to research questions three and four in which it was sought to establish what kind of

information the sector needs, how that information is sought, where the sector acquires its information, and on what topics. It also attempts to identify and document types, sources and channels of information used and to establish methods used to acquire information and to identify information systems and services utilized.

7.4.1 Information needs

Ideally, information is needed because it affects peoples' lives. It is what, in Dervin (1995) words, 'describes an ordered reality about the nature of the world people live in, that is, its history, its future, its functioning, people's place in it, their actions and the potential consequences of those actions' (Dervin, 1995:2). An information need is a cognitive experience that represents gaps in the current knowledge of information user (Devadason & Lingam, 1997:41). This need manifests itself as a symptom of uneasiness or, in a kind of behavior that signifies that there is not enough information immediately available to confront or solve the problem. A problem may manifest in various ways, such as in *decision-making, informing, learning, instruction, verification, coping with the problem, overcoming the barrier, or just in understanding the situation*. Defined by Krikelas in Rodhe (1986:52) an information need is the recognition of the existing uncertainty. Zweizig in Rohde (1986:53) describes it as something, which prevents an individual from making progress in a difficult situation. The information seeker desires information because of its relevance to the information need. It is argued that in information relevance, information seekers find *intrinsic worthiness, value, accuracy and timeliness of information*. For the purpose of this study, information need is a situation that arises when an informal entrepreneur encounters a work-related problem that can be resolved through information.

Many questions were asked to seek clarification on this item. Therefore, it was essential to establish from entrepreneurs whether they had ever experienced or encountered a need for information in their work. Findings indicate that the majority 575 (95.5%), of the respondents stated in the affirmative. However, 27 (4.5%) intimated that they had not realized the need for information.

The next question was directed at those who had experienced a need for information. This question sought specifically for the circumstances under which information was needed. To avoid misinterpretation of the concept information, respondents were given a clarification on it. This exercise was taken very slowly through their work situations or incidences and examples given of what could have happened. From explanations given, respondents were then able to understand and appreciate the difference between what they talked about every time and what information meant.

Having gained their clarity of the concept, they were asked to reflect into history of their recent past for about four months and to indicate whether they could remember situations when they needed information. They were then asked to mention such times or situations.

To this question, 642 frequencies were received from 602 entrepreneurs. This meant that on average, each respondent had more than one experience. Analysis of the responses showed that three most important incidents were identified. The first one was that training and new skills accounted for 152 (25.2%). This was followed by marketing, 144 (23.9%) and by situations when they were looking for inputs, sources or supplies, and were considering their prices 143 (23.7%). Other minor incidences included situations when seeking loans, 21 (3.5%), pricing products 21 (3.5%), seeking for help on hazards affecting the fishermen on lakes 20 (3.3%), transport 30 (4.9%), competitors, 9 (1.5%) and Government policies 6 (0.9%).

Incidentally, 51 (8.5%) had experienced other incidences such as the need for information on record keeping, maintenance of tools and equipment, the need to keep abreast with current developments in the trades and the country in general, how to improve quality and minimize overheads, and other business opportunities and employment matters. In business development, the needs expressed were how to improve planning and management of businesses, how to increase output and viability, and the ability to develop business ideas. Forty-five (7.5%) did not respond to this question.

It is clarified that inputs include tools and the raw materials. In the context of the informal sector raw materials can mean factory goods like welding rods, iron bars, paint, fishing nets, clay, palms, etc.

The inquiry moved a little further to seek if they were satisfied with the information that they had obtained. Of the 174 (28.9%) that answered, the majority, that is, over 90%, stated that they were satisfied. Those who did not said failed to get the information they wanted and could not talk about it. Others did nothing to look for information, while a few others used their own experience.

7.4.2 Information seeking

Information seeking is a process in which an individual goes about looking for information. It is a complementary process to information need. As a process, it requires an information seeker to apply personal knowledge and skills – what might be called “personal information infrastructures,” such as the person’s cognitive abilities, his/her knowledge skills in relation to the problem/task domain, knowledge and skills in general, knowledge and skills specific to a system, and knowledge and skills regarding information-seeking (Marchionini, 1995). According to Xie (2000:843) information users normally employ their general cognitive skills and their knowledge to: (1) represent their problems/tasks, (2) establish a set of sub-goals to fulfill the over-all goals and (3) develop techniques and strategies to seek required information. At the same time, Xie explains that users’ personal information infrastructures are also developed during the information-seeking process when users gain knowledge and skills to adapt to different situations and problems. Some of these strategies are searching, tracking, selecting, *comparing*, *acquiring*, *consulting*, and trial and error. Ellis (1989:178) using a behavioral approach provides some other strategies such as starting, chaining, browsing, differentiating, monitoring and extracting information.

There are already a number of models and schemes describing human information seeking behavior, some of which are those of Taylor (1968), Kuhlthau (1992), Eisenberg

and Berkowitz (1992), Wilson (1999), Ingwersen (1982) and Krikelas (1983). Most of these, according to Itoga (1992:341), present scientific explanations of the steps of human information seeking. Similarly, the studies that emphasize the user's goals are equally recognized by Xie (2000:841) are such as those by Belkin, Marchetti & Cool, 1993, Daniels, 1986; Shenouda, 1990. This study considers information seeking as processes by which the informal entrepreneurs look for information that bridges the gaps between their information needs and their information sources. Among them is the context within which the need for information arises or is experienced. That is, the entrepreneurs looking for information in the environment, barriers that may exist to either engage in information seeking or in completing the search for information successfully. Some of these are said to be personal characteristics such as purpose, orientation, ease, distances, cost; and environmental characteristics such as existence of information systems, cultures etc. And because of a multiplicity of situations obtaining in the environment, an information seeker is likely to engage in multiple types of information seeking strategies within an information-seeking episode. Xie (2000:841) quoting Bates, Belkin, Chang, Downs, Saracevic, Zhao, Kuhlthau, and Oddy agrees to the fact that people engage in multiple types of information-seeking strategies. Information seeking, therefore, is a constructive process (Dervin et al 1982), the behavior of which attempts to gain insights into the way individuals go about looking for information. Taylor (1991:221) defines that kind of behavior as the sum of activities through which information becomes useful. Being useful is a way of saying that the information problem an entrepreneur is faced with, is resolved.

Because entrepreneurs said they had experienced information needs, they were asked how they sought for that information. Table II shows how information was received. Over two thousand answers were received. Evidently, there are a variety of reasons for information seeking.

Table II: Information-seeking (N=602).

Information pathway	Frequency (f)	Percent of respondents
Listening and talking to people	357	59
Contacting people who know	354	59
Using personal experience	332	55
Asking a friend/relative/working neighbor	297	49
Visiting and asking customers	197	33
Listening to radio/TV	146	24
Using social networks	126	21
Asking a supervisor	115	19
Reading newspapers/manual/books	96	16
Inquiring from educated people in the area	62	10
Asking Extension Agents	52	8
Asking role models in the area	49	8
Seeking assistance from area councilors	29	5
Asking and listening to politicians	17	3
Visiting a library nearest to me	10	2
Other	40	7
No response	24	4

NB: Respondents use more than 1 information pathway

Table II shows that the most popular methods employed by the entrepreneurs in seeking information are informal and oral in nature and involve assistance from people close by. These methods include listening and talking with others, contacting people who know, using personal experience, asking friends, or neighbors and seeking information from visitors such as researchers, tourists and customers. Listening to radio/TV secured the sixth position while use of social networks and asking supervisors followed with 126

(20.9%) and 115 (19.1%) respectively. Reading newspapers, manuals and books 96 (15.9%), *inquiring from educated people who stay or come to their areas*, asking role models, and relying on government extension agents were on the lower side of the scale. Area councilors, politicians and the public library proved to be least effective. There is evidence that the use of *formal channels and modern methods of information transfer* play an insignificant role for the entrepreneurs involved in the study.

7.4.3 Information sources, systems and services

In chapter one of the study, an assumption was made that informal sector entrepreneurs use the information services of public institutions and non-governmental organizations to access information. It was therefore important to establish what sources the entrepreneurs used to get their information and how this information was received. The questions specifically sought to find out whether the entrepreneurs were aware of the associations that are related to their trades, and which could provide information services – and if they did, whether they were using these associations to obtain information. The questions were also aimed at finding out what type of services was sought and what methods the entrepreneurs found most reliable in getting information?

7.4.3.1 Sources of information

The question soliciting information on sources received more than two thousand responses. This is an indication that of the 602 respondents, most of them had at least more than one source while actually some could have had one sources of information only. This in itself is a good indicator because experience tells us that there are many sources of information and also that entrepreneurs use multiple information-seeking strategies which would lead them to many sources. Table III provides clarity on this aspect.

Table III: Method of Information seeking N=602

Source	Frequency (f)	Percent of respondents
Word of mouth	539	89
Personal experience	439	73
Friends/relatives/neighbour	379	63
Radio/TV	231	38
Work supervisor	118	19
Print media (newspapers, newsletters)	118	19
Workshops and seminars	111	18
Local councils	83	14
Area politicians including opinion leaders	66	11
Business Assocs. + bus. promotion centers	47	9
Orientation tours	43	7
Educational institutions	36	6
Churches/mosques meetings	35	6
NGOs	24	4
Signposts	21	3
Cultural ceremonies	20	3
Library	17	2
Other	38	6
No response	4	1

NB: Respondents use more than one method of seeking information.

Table III shows that entrepreneurs largely depend on their immediate surroundings first for information. That is why word of mouth received a score of 539 (89.5%), and stood out as the most important source of information for the entrepreneurs in Uganda. Use of personal experience was rated second with a score of 439 (72.9%), and third was friends, relatives and neighbors 379 (62.9%). The fourth-important source was radio/TV 231 (38.4%). Print media (newspapers and newsletters) and work supervisors tied at 118 (19.6%) respectively. Workshops and seminars were also found to be appropriate 111 (18.4%) sources of information followed by local councils 83 (13.8%). Other sources in their decreasing order included: area leaders (opinion leaders, politicians), business associations, trade fairs, orientation tours, educational institutions, and places of prayer. The public library, cultural ceremonies, signposts and NGOs featured lowest. What this shows is that information is mostly sourced from within the environment where the businesses are located. Subsequently information sources that are far away from the entrepreneurs are likely to be used least of all.

7.4.4 How information is received

This section is oriented to the formats in which information is received. Pulling the threads from sources of information and how that information was sought, it comes as no surprise that almost half 276 (45.8%) of the respondents received their information directly and verbally. Of the remainder, 67 (20.5%) accessed it through the radio and in TV broadcasts, 33 (10.2%) received information through the written word (letters), while another 33 (10.2%) received it in the printed form, and 25 (7.8%) got it through seminars and lectures. Others received it through exhibitions or demonstrations, rumor mongering, telephone calls, and the Internet. Rumor mongering is a kind of verbal communication based on hearsay or grape vine. The verdict is that informal methods of receiving information are most prominent in the informal sector.

7.4.5 Information sought most often and occasionally

Indirectly, the logic behind this aspect was the need first to establish what the information needs of the sector are, and secondly to differentiate the most important needs from

occasional information needs.

Two questions were asked. One was on what topics does the respondent seek information regularly and on what topics only occasionally. The common themes were marketing and pricing 232 (38.5%), sources of inputs or supplies 200 (33.2%), and training 163 (27%). Others were loans/grants 33 (5.5%), health 18 (3%) and quality control 12 (1.9%), government policies 6 (0.9%), while security 5 (0.8%) and transport 4 (0.6%) featured lowest. Others were 25 (4.1%). "No response" stood at 33 (5.5%).

Turning to the issue of occasional information needs, respondents mentioned marketing and pricing 229 (38%), training 96 (15.9%), supplies 83 (13.8%), and health 60 (9.9%). Transport scored 34 (5.6%), loans/grants 32 (5.3%), government regulations 30 (4.9%), storage and preservation 19 (3.1%) and security scored 16 (2.6%). Others, that is, 38 (6.3%) mentioned issues pertaining to their specific trades. Invalid response was higher at 62 (10.3%).

7.4.6 The Public Library

An assumption had been made earlier in Chapter One that Public Libraries would be a useful source for information requirement of the entrepreneurs. This assumption is based on the matter of public policy that Public Libraries, wherever they exist, are social institutions free for use by all. Therefore it was a well-founded assumption to establish if entrepreneurs do get information from libraries. Four issues were considered. First was the need to know respondent's knowledge of the institution. If they did not, no further questions were asked. And if they did then other questions were asked.

Awarenes of a public library

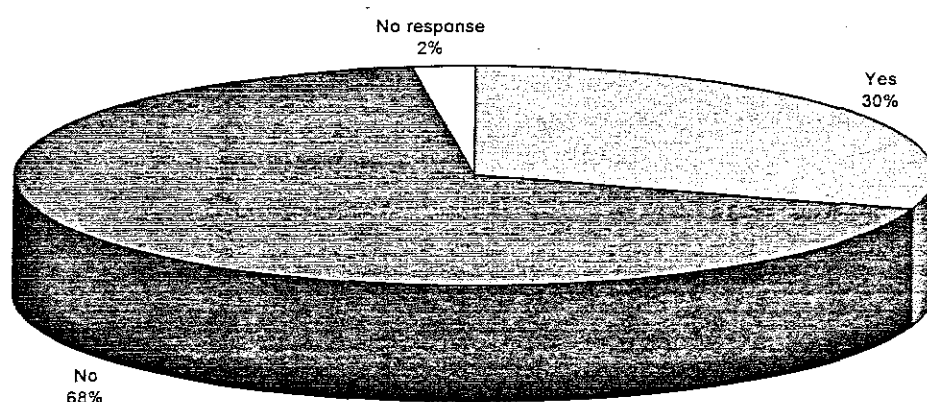


Fig.5: Awareness of a Public Library

The findings related to the first question indicate that almost seventy, 409 (67.9%) of the respondents did not know what a Public Library was. For this group, that marked the end of that aspect of the inquiry. A small number, 180 (29.9%), were familiar with the term, while 13 (2.2%) did not give any view. Those who knew were asked whether they used it to get information. The outcome was that almost seventy percent, 395 (66.6%) were not using making use of library services. Only 24 (13.3%) were using it regularly while another 34 (18.8%) were using it occasionally. The non-response rate was 5 (2.8%). Reasons are unknown. However, even when the regular and occasional users are combined, the impression still remains that public libraries of Uganda are seldom used by the informal sector as a source of information.

Use of the public library

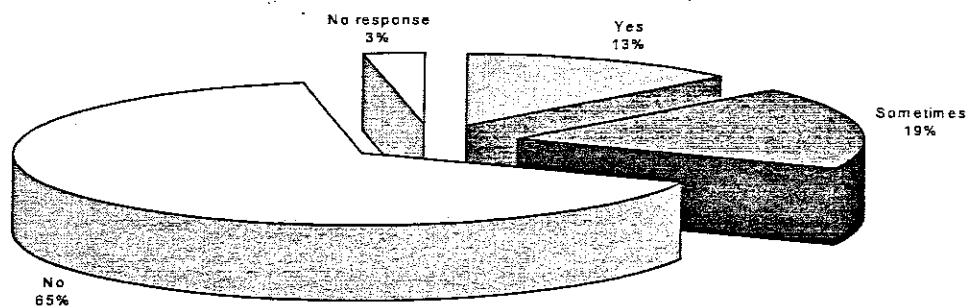


Fig.6: Use of Public Library

Information sought out in the Public Libraries centered on training, addresses of places to inputs, modern production methods, more general knowledge, farming methods, current affairs, and technical information on radio/TV repair. Information services rendered were no more than lending services, reference service, and room for reading or waiting for someone.

7.4.7 Uganda Manufacturers Association (UMA)

This is a business organization that was created to promote private sector development in the country. For the purpose of this study, it was also assumed that informal entrepreneurs access information through this organization. Four issues were sought about UMA. The first question was related to the respondent's knowledge of this organization. The second was on whether it was used for information access. The third question addressed the type of information while the last focused on the services rendered by UMA.

Findings indicate that out of the 602 respondents, 241 (40%) knew the Association. The other 348 (57.8%) did not know it. Only 13 (2.2%) did not respond. Of the 241 (40%) who knew, almost three-quarters 172 (71.1%) did not use the organization for information. Only 67 (27.7%) reported that they did. Non-response was 3 (1.2%). This indicates that UMA is not much used by informal entrepreneurs even though it may have the information and the services that they need.

The 67 (27.8%) who professed to know the organization, were furthermore asked about the type of information that they obtained from it. They reported that they obtained information about loans, training, markets, and seminars and about business management. On the matter of services received, they mentioned that they were offered information on new technologies, new skills, and how to work efficiently. Similarly they accessed information about business opportunities, new experiences and about UMA, which was also involved in training and exhibitions at the time. It has a library and a resource center where people can access trade information. UMA has a well-established library and information center and has the capacity for handling information requirements of the informal sector. It was established as a UNDP funded project. However, the entrepreneurs are not using its information services and this may mean that these services have not been marketed widely.

7.4.8 Uganda Small Scale Industries Association (USSIA)

USSIA is a membership organization with branches in most districts. As the informal sector is comprised of micro and small enterprises, it was expected that the informal entrepreneurs would identify the USSIA as an essential organization for their information needs. Four issues were considered with regard to USSIA, namely awareness, membership, information sought from it and its services.

Findings indicate that more than half, 340 (56.5%) of the respondents were not aware of the Association. Only 206 (34.2%) knew it. There was no response from 56 (9.3%). Of

the 206 (34.2%) who knew it, almost three-quarters 168 (81.5%) were not members. Only 64 (31.1%) were members. The non-response rate stood at 3 (1.5%).

With regard to information sought, it was found that USSIA organizes training, gives guidance to members, provides loan schemes, promotes networking and information technology use, packages information on new developments, promotes self development, production techniques, and knowledge on how to improve product quality. It also gives financial assistance, assists with the location of the inputs for its members, gives them information on business development, etc.

Services rendered include information sharing through the publication of the USSIA newsletter, sale of information products such as the newsletters, research papers, database information, policy documents and joint promotion of products. USSIA also carries out advocacy and lobbying for its members. Information available includes sources of microfinance, technology, markets, MSE support institutions and information about training opportunities. The information materials are produced in print. The information is disseminated through workshops, sold at the offices and sometimes through the press.

The channel of information delivery includes print media, radio, dialogues, exhibitions, and connecting clients to persons providing particular services. The picture that emerges shows that although USSIA is doing a lot of good work and has the capacity to handle the information needs of the informal entrepreneurs, only a small number of industrialists seem to be benefiting from these services at the moment. Entrepreneurs appear not to be aware of the work that the organization is doing. Entrepreneurs do not seem to appreciate the value of this organization and the informal sector is therefore not using its full potential – even though they are represented in this Association.

7.4.9 The Uganda Informal Sector Association

The Uganda Informal Sector Association was formed in the early 1990s with the purpose of bringing together informal workers under one organization. There are many other

minor organizations in the informal trades, such as the stamp makers association, hawker's association, old clothes sellers association, herbalist's association etc. Once formed it was to represent entrepreneurs' interests. It was found that the informal sector was not effectively represented by individual trade associations and other business associations that were in operation at the time, such as the Uganda Small Scale Industries Association.

The initial assumption about this association was that it serves most of the information needs of the informal entrepreneurs since it was created to cater for members not directly catered for elsewhere. As such it was expected that the benefits of membership would be appreciated. Only three confirmatory issues were investigated. The need was to find out whether the informal entrepreneurs were aware of their Association and whether they made use its information services and the type of information received from it.

Surprisingly, it turned out that 489 (81.2%) of the respondents were not aware of the existence of the Association. Even the researcher could not locate their office. Those who knew about it were few, only 50 (8.3%) of the people sampled. The non-response rate was high, namely 63 (10.5%) respondents. Although no reasons were given, the response seems to imply that people are disgusted with hearing of associations that do not benefit them. People complain instead that it is a useless association since it is for a few people only.

Of the 8.3% who knew about it, 40 (80%) of them did not make use of it, while only 7 (14%) made use of its facilities. The non-response rate stood at 3 (6%). The reason could be that it is a membership association. People are not willing to pay for membership and consequently, they do not gain from it. The 7 (14%) who knew the association, quoted training and marketing as the only information that they derived from it. This finding gives an impression that, like all other Associations discussed already, the Informal Sector Association does not benefit the people that it is supposed to serve. This does not mean that it is not interested in helping its membership. Potential members are not aware

about its existence and services, neither has it produced role model entrepreneurs that other members seek to emulate. It does seem as if the management and marketing of the association is worth revisiting.

7.4.10 The Private Sector Development Foundation

This organization was established to support the private sector to develop through various programs. Wherever it is established in the country, this organization is active in training, offering advice on marketing opportunities, helping MSE support institutions and makes known to the sector the probable credit institutions that can assist it.

Data reflecting interest in this institution corresponded with findings regarding other institutions, with reference to awareness, use of its services, type of information obtained from it and the information services rendered. The first issue was one of awareness. It turned out that over three-quarters, that is 465 (77.2%) of the respondents were not aware of the foundation. Only 120 (19.9%) knew about it. The non-response rate was 17 (2.8%).

Of the 19.9% who knew about it, 86 (71.6%) of them did not use it, while 31 (25.8%) did. The 31 (25.8 %) stated that they received loans/grants, training and market and job opportunities information from the Foundation. Of these, information about loans/grants, training and markets provided the most appropriate information. The information services are provided in the form of pamphlets, data sheets etc. Findings on this organization indicate that informal workers do not benefit from it. The organization is not well known. It has not marketed itself widely.

7.4.11 The Uganda National (District) Chamber of Commerce and Industry (UNCCI)

The UNCCI is an organization that has been established a long time ago to support the business sector with information about markets, taxation, and credit institutions. The study set out to establish whether the members of the informal sector were aware of the

services that the UNCCI offered, whether they made use of its services and, if they did, what kind of information services were in demand. The results of this section are not surprising. The majority, 418 (69.4%) were not aware of the UNCCI. One hundred and sixty eight (27.9%) knew about it. The non-response rate was 16 (2.7%).

Of the 27.9% who knew about it, 146 (86.9%) were not using it. Only 18 (10.7%) were using it for accessing information about markets and training, exposure, business improvement, schedules for checking or updating the measuring scales (maintenance and repair), how to do business with foreign countries and companies, and about business trends etc.

The conclusion is reached that the UNCCI is not benefiting informal entrepreneurs as it should. Entrepreneurs have heard about it but they do not know what the organization is doing, apart from press reports, mostly about leadership wrangles. The organization does not appear to be marketing itself well enough to be known.

7.4.12 Other Organizations

In order not to restrict the inquiry to particular organizations, other institutions that could be working for the sector were investigated. The findings reveal that there are indeed many such organizations. Broadly speaking, they could be divided into two categories, namely Government Departments and NGOs and Community- Based Organizations (CBOs). Line government departments include: Trade and Industry, Fisheries, Local Government, Forestry, Health, Finance through the Uganda Revenue Authority, Education, Gender, Labour and Social Services, Office of the Prime Minister (Poverty Alleviation Program), *Entandikwa* in which there is Youth Enterprise Scheme (YES). All these departments are supposed to be providing information related to their mandates.

NGOs and CBOs include the microfinance institutions, religious organizations (non-denominational, but restricted to particular areas such as extending loans, training, functional adult literacy, orphans, women etc.). They include FINCA, PRIDE-Africa,

NUMA, UWESO, LIDDA, LDDP, Uganda Batteries LTD, PRESTO, Uganda Gatsby Trust, Uganda Women Entrepreneurs Association LTD (UWEAL), Uganda Oil Seed Processors Association, ADRA, MISREO-Germany, Uganda Bee Keepers Association, Uganda Fish Conservation Association, Uganda Fish Processors Association, the National Federation of Informal Sector Associations (FISA), Kampala *Jua Kali* Association, Uganda Leather and Allied Entrepreneurs Association, *Uganda n'endagalla Lyayo* (Uganda Herbalists and Traditional Healers Association), Uganda Change Agent Association etc. It was established that there are associations in Uganda that have been established to help the informal sector meet some of its objectives. In the information domain, there seems to be none that works exclusively for information provision. Most organizations rather make information provision a part of their program activities. At issue here is whether the informal sector's information needs could be adequately served in such a way? This is a new line of inquiry that this study does not aim to pursue at the present study, however, what is presently known, is that there is no organization that has been created exclusively to serve the informal sector with information. Much of the information is shared informally outside organized systems.

7.4.13 Reliable methods of obtaining information

The entrepreneurs were asked to identify those methods they used and relied upon most of the time in order to access or receive information. Essentially, it was not known how the entrepreneurs in the sector were obtaining their information. The main idea was to ascertain whether the entrepreneurs used the existing public sector information systems and to find out whether other information systems were used. The results are summarized in Table 4. Apart from the role played by Radio/TV, the outcome shows no surprise elements. Basically, word of mouth, friends, Local Councils and local area leaders were found to be the most reliable methods and sources of information.

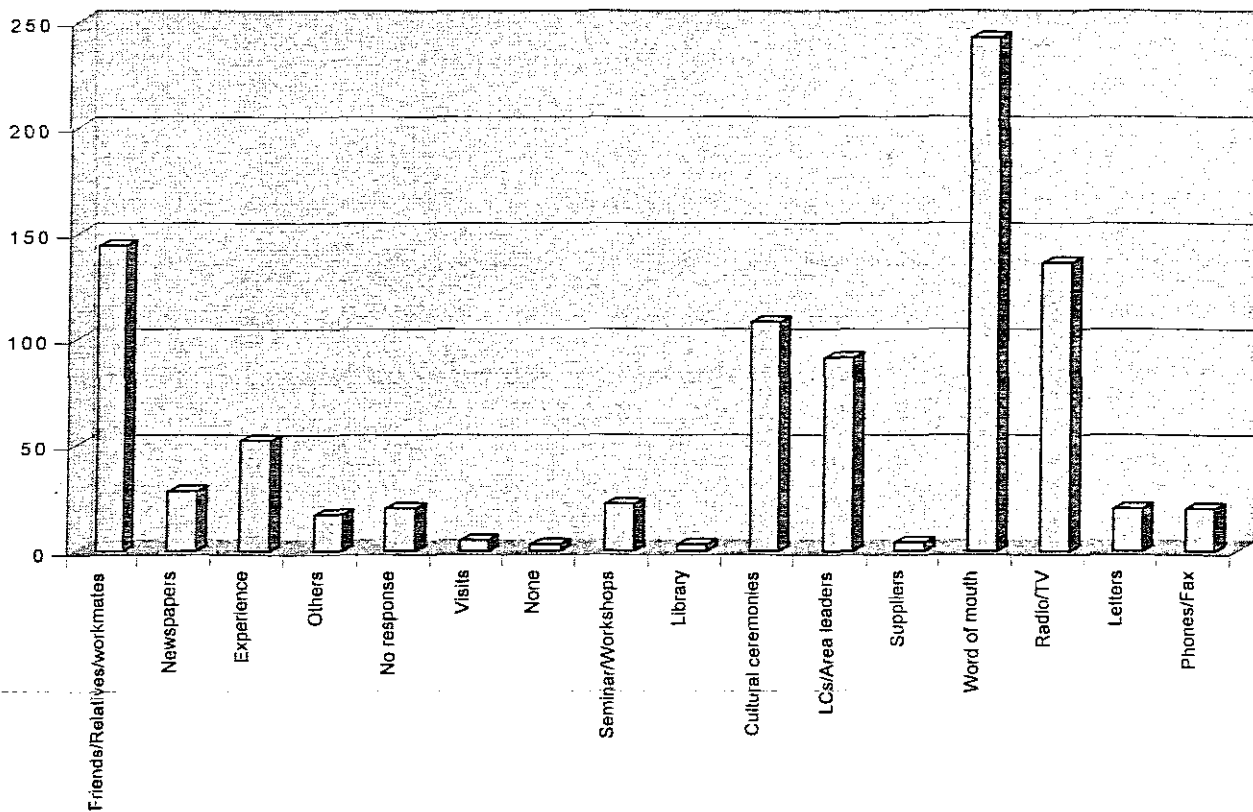


Fig. 7: Most reliable methods of obtaining information

7.5 The role of information

Information transfer models emphasize the role of impact in ascertaining whether information given to a recipient satisfied his/her needs and influenced the activity that it was sought for. In terms of the role that information plays in the sector; the use that it is put to in problem solving and the impact that it makes on management, growth and development of informal enterprises, the study would be in a strong position to say that information is an important resource for the informal sector. Therefore, the main aim here was to explore the uses to which information is put to once acquired. The specific objective was to establish from the entrepreneurs the role that information plays in their activities, to determine the role and impact, if any, of information in the sector, a number

of questions were raised. In order to find answers to these questions, question five needs to be answered.

7.5.1 Does information help?

Firstly, it was necessary to find out whether, according to the entrepreneurs' understanding, the information that they obtained helped them in facilitating jobs and tasks. It was most heartening to establish that almost all respondents, 554 (92%) out of 602, answered that information received was indeed valuable. It helped them to make rational decisions and to take appropriate actions. For some of them it increased the capacity to see things more clearly and to become more focused. Forty-one (6.8%), however, said that information did not assist them. Several assumptions can be made from this. First, it is likely that these are people who do not really understand what is meant by information and are therefore unable to differentiate between information and things that are often repeated by them. Secondly, it is also likely that they do not understand the value of information. Thirdly, by voicing the opinion that information is of no use to them, they may imply that they do not look for it. Fourthly, there could be other undisclosed factors that influenced their opinion. Only 7 (1.2%) did not respond to this question.

7.5.2 Use of information

With reference to the previous question, 92% of the informal entrepreneurs stated that information was a valuable resource. This was expressed with regard to the following factors: inputs, markets, training and people themselves. This implies that information was needed at every stage, namely at the initial, management, production, and distribution stages. It could be stated that activities such as finding initial capital, taking decisions on the type of business to embark upon, the means of starting a business, how and where to look for inputs, the use of inputs, taking decisions on what to produce, the quantity and quality, and how and where to sell, prices, price and business trends and how to deal with customers cope with opportunities, challenges, and threats as they arise from time to time, require serious consideration. Furthermore, information helped them to

understand day-to-day current affairs, including government regulations, acquiring skills, and relations with other people.

7.5.3 Extent of dependence on information

This was a very technical question that required the ability to determine the extent of reliance upon information. This study did not pursue the question to that extent, but concentrated instead on the respondent's immediate value of the information in relation to the urgency of the problem in question. A variety of answers were expected, as respondents were involved in different activities. It can be argued that the extent of dependence on information depended, in turn, on the nature and extent of the problem affecting an individual at a particular point in time. Therefore, only generalizations are made. For example, a fisherman who lost his nets to thieves or floating islands could not wait but to ask where the nets could have been taken to. Therefore, this particular fisherman's information need concerning the location of his nets would be greater than a fisherman who merely wanted to inquire about who or where he could have his nets mended. Likewise, a brickmaker would be more in need of information about building sites than a window fitter (at that particular time) because window fitting takes place after the walls have been erected. It is therefore implied that the degree and extent of dependence on information is measured in terms of how critically or urgently it is needed. The more critical the problem, the more dependence there is on information and vice versa.

7.5.4 Aspects of work that require information without using it immediately

Like the last one, this was a very subjective question that could not be generalized without giving wrong information. This was due to the fact that certain jobs and tasks require information at a later stage, rather than at an early stage. On the other hand, there are tasks that require information all of the time and others that require more information at the beginning and less at the end. The common denominator in all of them, however, is that the requirement for information is a manifestation of an incomplete or anomalous state of knowledge and information with regard to entrepreneurs at particular moments in

time. This is what Mackay (1960) in Taylor (1968: 180) called “a certain incompleteness in [the person’s] picture of the world – an inadequacy of readiness to interact purposively with the world around him in terms of a particular area of interest.”

Using that scenario, this question will be best answered through case-by-case analysis. Only a few examples are used to prove this point. In charcoal burning which really is a rural activity, little information is required, if any, by the *carbonari*. All that he has to do is to cut down a tree on his farm, chop it into pieces and then cover it with soil before burning the wood. After it has burnt, the charcoal harvest takes place. To this man the most important aspect is where to sell his product at the highest price. This means that information will be required much later. But information would be important initially if the trees belonged to someone else or to the government. This is because it might be illegal to cut down certain species of trees. The restrictions could be emanating from environmental factors. In any, or all of these cases, information will be required beforehand. Another example is that of the mat maker. In the first place mat makers know that palm trees grow in the forests nearby or some distance away. They do not need to be told that palms are in the forest. They only need to know which forest has the required palm trees. Not much information would also be required at this point. The mat maker would continue going to the same forest whenever there is a need. But a time may come in the future when there is a need to manufacture mats with particular designs and with particular colors. This is when information is required. The most important information at this stage is dictated by the customers’ needs and these needs keep changing. Using past sales experience, she would know what type of mat sells fast and which go slowly and at what price.

Let us now come to the urban areas. A car washer would not need information immediately about how to wash a vehicle but would need information later on how to clean the engine. This is the difficult part, which requires information from others with knowledge and experience. Let us look at another example. In carpentry, information would not be required at the initial stages of ferrying timber to the workshop, but when it comes to measurements, which is an activity performed later, information becomes

essential. It is hoped that these examples help to illuminate the principle. Briefly, it can be said that there are activities in the informal sector that, to a certain extent, depend on information while others are less dependent on this input. On the other hand there are activities that depend on information at every stage, or at later stages, if they are to be done properly.

7.5.5 Aspects of work that are entirely dependent on information

It has emerged that there are certain jobs and tasks carried out in the informal sector that *need different supplies of information at different stages. It can be at the beginning, in the course of doing the work or at a later stage.* It is also understandable that there are certain jobs in the informal sector that are complex and require information all the time. A suitable example is found in garages. Nowadays, more and more cars are operated by electronic systems. When a car of this nature develops engine problems, its owner must first of all be certain that s/he takes it to a garage with suitable mechanics with knowledge in car electronics. On delivering the car to that garage the owner gives a brief description of the car's problems to the mechanic. At this point the information activity begins. The mechanic accepts the car, whether the owner is present or not. He examines it very *carefully, and in working on the car, more information is gathered at each stage and put to use in dismantling parts, replacing and re-assembling them.* Each stage in the process opens up another dimension of information need, sources and use. Support may be obtained or information supplemented by consulting the manufacturer's handbook or even fellow mechanics with more experience. In order to ascertain that the car has been repaired successfully, a test run is made. If the work is not done well, there is a high probability that something will go wrong. All these activities involve information.

Another example can be found in the hair salon. Hair management is an interesting and scientific subject and requires a considerable knowledge of chemistry. It also requires knowledge of different types of oils, their use, information about their expiry dates and the possible reaction of the chemicals with the human skin. It is also commonly found that workers in the salons are not necessarily well educated in science. Right from the

start of the operation, care is taken at every stage to make sure that the right chemicals are applied in the right way. This is to avoid damage to the scalp during the course of working on the hair and to prevent the hair from being dissolved by the chemicals. This is an example where information is important at every stage. These two examples demonstrate, it is hoped, the situations where information is essential at all times.

7.5.6 Aspects of work that do not necessarily require information

Although it can be argued that all work requires information, there are some aspects that do not necessarily rely on information directly. Again some examples are given in an attempt to illustrate the point. In the fishing industry, fishermen do not require information to remove scales from fish or to wash nets. It is a matter of common sense and experience through the ages has taught that fish should not be eaten with scales. A fishmonger would obviously not ask a colleague whether it is necessary to de-scale fish. If he/she did, it would raise doubt about that person's mental stability. It is also known that fish can see dirty nets and that they are inclined to dodge them. Another example is that of a grain miller, who does not have to ask his customers the reason for bringing their grain to his mill. He/she automatically knows from experience that the customer needs a service, namely the milling of grain. Information behaviour will not be observable because no external information is required for this purpose.

7.5.7 The contribution of information to problem solving

It is important to determine the usefulness of different kinds of information and the importance of their contribution to the sector. Indicators of the usefulness of information are clearly seen in the context of better performance, more profits, stability in business, more skills, upward movement towards a medium scale of operations, reduced problems at work places etc. The question should rather be: "What was the contribution of information to the solution of problems experienced by the entrepreneurs?" Before this question could be answered, it was recognized earlier that entrepreneurs do experience the need for information. It was also learnt that those who use information gain from it.

On the basis of these findings, it was important to ask this question. The following Table indicates the effect of information.

Table IV: Contribution of information to problem solving (N=602)

Effect	Frequency (<i>f</i>)	Percent of respondents
I obtained the skills required	139	23
Self-reliance	88	15
Ability to obtain inputs	87	14
Improved efficiency and effectiveness	82	13
Able to pay tax more easily	26	4
Obtained better market	67	11
Enabled me to sustain myself	62	10
Got employed	9	1
Improved my health	8	1
I became more enlightened	6	1
Other	26	4
No response	46	8

NB: Information contributed more than one benefit in a few cases.

As shown, the findings reveal that the appropriate use of information resulted in the gaining of skills, becoming self-reliant, and attaining ability to access inputs at reasonable prices. Entrepreneurs became more efficient and effective than before. Furthermore, information use contributed to better marketing strategies, that is, in obtaining a dependable market resulting in increased sales, more profits and more customers.

Entrepreneurs were also able to sustain themselves and improve their health status because a little more money was now available to use; they could also gain employment, understand issues more clearly and make decisions more rationally than before. Other hidden benefits include increased output, minimized accidents and the ability to produce on schedule.

It was observed that entrepreneurs were better able to access training opportunities and loans; they were also enabled to produce marketable goods, improve customer relations, and to learn about and meet customer needs. Improved information usage also increased their ability to sell their products at competitive prices, while some who were enabled to engage in better fishing practices reduced post harvest losses. This enabled them to plan within available funds and time, so much so that from then on, things were done in a much better way, as mistakes and errors became fewer. They were able to appreciate the reason for paying taxes. More specifically, groups like fishermen were able to stop bad fishing methods, carpenters were able to produce goods with new designs, builders were able to get more tenders, while metal workers reaped similar benefits. Apart from these advantages, their individual and collective welfare improved. Children were able to continue with their education. Plots were purchased in urban areas and houses built. As a result of their improved means, many men could get married as a result of the savings, and some successfully aspired for political positions at a local level. Others accumulated wealth in the form of cattle, cash, bicycles, cars, or opened shops. Furthermore, others shifted to better paying occupations or moved to urban centers where they opened shops, while many have succeeded in expanding their businesses.

7.5.8 Impact of information use

In assessing the value of information usage, the question arose: "If information was found to be one of the critical success factors, what difference did it make in the lives of the entrepreneurs and to their enterprises?" In order to answer the question, it was necessary to gain an understanding of the value and impact of information, as the next step in the study. The aim was to explore the impact of information on the enterprises. The objective

was to determine the impact of information access, exploitation and use on the growth and development of the informal sector in Uganda. This is what is discussed in this and the next section.

The starting point in the evaluation was the word "impact" itself. This word has mechanical connotations, that is the material effect of a shock. It is also born in mind that the most often used measure of impact is based on experimental and or Ex Post Facto studies. In this study impact is restricted to signify new conditions that are established after information has been used. This is based on entrepreneurs opinions that by and large could be unreliable and therefore give wrong interpretations. The difficulty arises from the inability to measure precisely the movement from the present to a better state. For example it is difficult to tell that it is information and nothing else that brought change in ones life. However, in general terms a simplistic measure is used. That is, a change purportedly brought by information use. In this case Menou's approach is considered. Menou's (1998:11) example of someone who was shown how to catch fish and was lucky enough to catch a fish at the first try, therefore does not prove much about the value and impact of information. It only proves that, from now on, this person will know how to catch fish. The example fits here. Therefore, in order to evaluate the impact of information usage, respondents were asked to list the benefits that information yielded for them and their businesses. Their ideas are collated in Figure 6. An open-ended question was used for this purpose.

Impact of information use

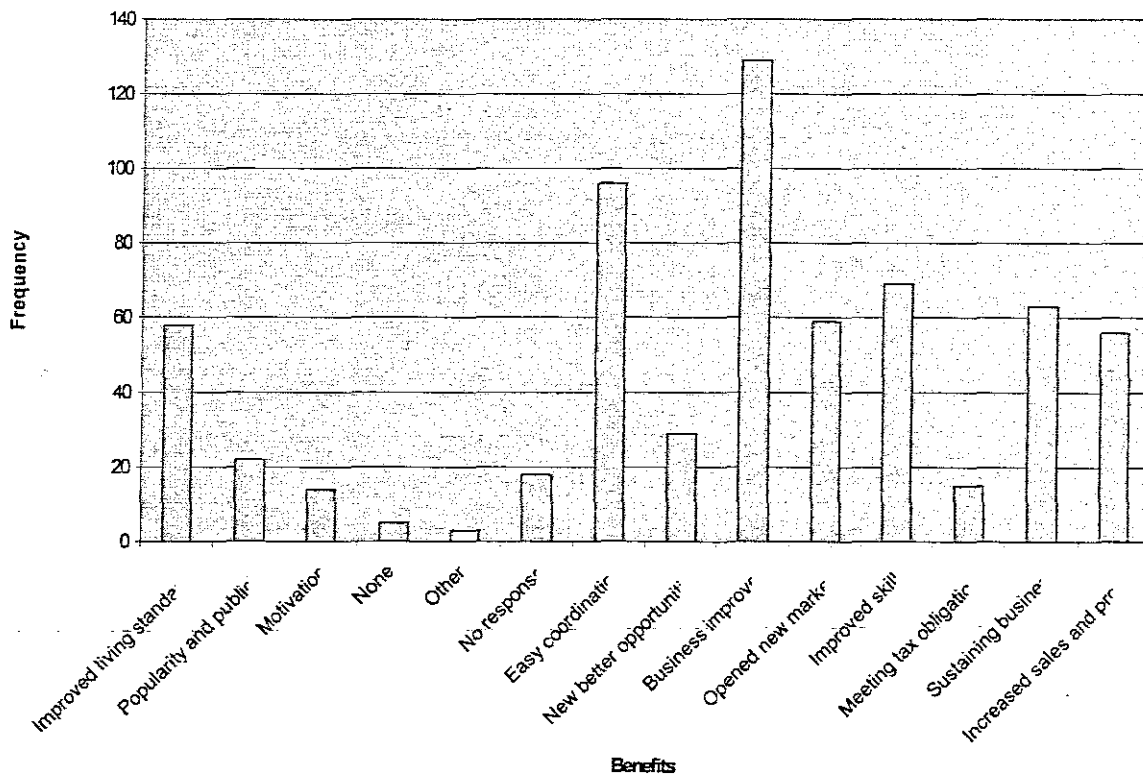


Fig.8: Impact of information use

The picture that emerges is that information use is tied to gratification and this is demonstrated by the expressed feelings of respondents. For example, businesses improved, or expanded. This could imply that more profit is being generated, or better management techniques are being used, or that diversification of business took place and that niche markets were probably exploited. Easy coordination, improved skills, business sustenance, improved living standards, new and better opportunities are all indicators associated with the overall improvement upon which impact can be established.

7.5.9 Information contribution to the growth and development of the Sector

In economics, it is rightly stated that there can be no growth without development. In the context of the informal sector, and more so being a business sub-sector, the same principle holds. Growth means a state at which a business starts, stabilizes and remains the same at all times or faces cyclical changes without collapsing. Development goes beyond growth. It means a stage is reached where benefits and trends consistently show that things are working out well and there is expansion, consolidation or specialization. Confidence levels show the positive side of business. In this study, an open-ended question was asked. Responses were collated. The picture that emerges is shown in Table V.

Table V: Information contribution to growth and development of the Informal Sector (N=602)

Contribution	Frequency (<i>f</i>)	Percent of respondents
Helps in skills development	194	32
Brings business improvement & sustainability	110	18
Helps in marketing	103	17
Creates awareness of government policies	59	10
Assists in securing inputs	42	7
Morale booster	21	3
Improves domestic income and living	18	3
Assists in publicity	12	2
Promotes change in attitude	7	1
Other	16	3
No response	41	7

NB: Information contributes to the development of the informal sector in more than one way.

As can be seen from Table V above, the main advantages include the following. Information is useful in long term skills development 194 (32.2%), that it brings about business improvement 110 (18.3%), helps in marketing 103 (17.1%), creates awareness of government policies 59 (9.5%), assists in locating inputs 42 (6.9%), improves domestic income and reinforces performance behaviour 21 (3.5%). Other contributions include increase in knowledge in general, but specifically in the area of competition. It was also found that information brought about a saving of time and that overall satisfaction is derived from information use. It can be stated that the informal sector entrepreneurs, through experience, are capable of analytical comparison between the past and the present.

7.6 Problems that the Informal Sector faces in accessing information

The aim in this section is to establish the constraints to information access experienced by the informal entrepreneurs. This is in line with the requirements of research question six. The objectives were to find out the problems that the sector faces in accessing the information that it requires and uses, and to explore the factors affecting the information flow and exploitation in the informal sector in Uganda so that they may be addressed. A further aim is to establish and assess the impact and effects, if any, on individual units and the informal sector as a whole due to a complete lack of information – and to observe how the entrepreneurs cope with the situation. The problems are as follows.

7.6.1 Experiences of difficulties in getting information.

The critical incident technique once again comes up. The first question asked was whether at any working time, entrepreneurs had experienced difficulties in obtaining information for their activities. The question was close ended. It required selecting one answer from those provided, that is, 'Yes', 'Sometimes', 'Uncertain' or 'Never'. The findings are that an overwhelming majority of 528 (87.7%) replied in the affirmative. Of the 87.7% of those who experienced difficulties, 301 (57%) of them said 'Yes'. Those who experienced difficulties at certain times numbered 227 (43%), while those who never experienced problems at all, were 70 in number or 11.6% of the sample.

7.6.2 How often were these difficulties felt?

It was important to establish the extent of the difficulties that were experienced among the 87.7% who had admitted having had problems with regard to information. The findings are that three-fourths 435 (72.2%) of the respondents sometimes experienced problems. Only 69 (11.4%) always experienced problems in this regard, while 22 (3.6%) were uncertain. And, in a rather contradictory manner, 28 (4.6%) respondents said they had never experienced problems of this nature at any time. This category should have actually said no to the first question! This non-response was received from 19 (3.1%).

7.6.3 Difficulties faced in getting information

Having learnt that the entrepreneurs faced difficulties in getting information, the natural course to steer was to find out what those difficulties were. This was an important question in that it reflected precisely those weaknesses that could be considered when adopting or designing an information system for the sector. The following Table VI shows the collated outcomes.

Table VI: Difficulties in accessing information (N=602)

Difficulties	Frequencies (f)	Percent of respondents
Inability to get the required information	284	47
No specific place to get the required information	279	46
Takes time to get correct information	278	46
Ignorance of information facilities	263	44
Sometimes information I got was unreliable	250	42
People with information conceal it	249	41
I didn't know where to get information	144	24
No time to look for information	65	11
Information given in languages I don't know	58	9
Most information I need is written, I am illiterate	34	6
Other	32	5
No response	28	4

NB: Respondents face more than one difficulty in accessing information.

As can be seen, the major problems included inability to get the required information 284 (47.2%), there was no specific place to get the required information from 279 (46.3%), it takes time to get the right information 278 (46.2%). Not knowing where to get information 263 (43.7%), sometimes the information they received was found to be unreliable 250 (41.5%) and people are mean with information 249 (41.3%) are some other problems. Other respondents expressed the view that they did not know where to

get information, while some did not have time to look for information. Others were handicapped by languages, and furthermore, there were those that were illiterate. This last point needs further explanation. Being illiterate does not mean an inability to appreciate information. It is likely that these entrepreneurs understood information to be of the type that is written or that, which is available in print only.

7.6.4 Impact of complete lack of information.

The inquiry went further to establish what would happen if there was complete lack of information. The aim was to gather entrepreneurs' experiences and views to see if these worked negatively against their performance. It was an open-ended question. Collated ideas yielded the following: entrepreneurs experienced difficulty in securing the right tools and inputs. The spares they bought were more expensive than they should have been. They bought fake inputs from the market. They also experienced failure in getting supplies or inputs on time and more money was spent on cheap inputs. In sales there was loss of competitiveness, difficulty in marketing, slowness of progress, late production, poor publicity, poor knowledge of pricing, poor public relations or customer care, loss of customers, loss of customer confidence, poor and unwanted services, low sales and profits, poor quality products, increased overheads, and business stagnation. In the last instance, common experiences included complete collapse of business, no progress at all, an increase in accidents, and failure to follow the right regulations.

Computed against occurrence, it was found that loss of competitiveness accounted for 116 (19.2%). Lack of information lowered progress as was felt by 113 (18.7%), difficulty in marketing came third with 110 (18.2%) responses, low sales/profits was the experience of 97 (16.1%), collapse of business was felt by 53 (8.8%), poor quality products being produced was the experience of 42 (6.9%). Furthermore, 17 (2.8%) felt that they had difficulty in securing inputs as a result of lack of information. The rest found it a difficult picture to interpret.

7.7 Recommendations of entrepreneurs to solve the information gap

In concluding the study, it was important to look into the future. Although the future is seldom predictable, it is nevertheless prudent to plan for it. This section, which covers research question seven, was formulated on the premise that information availability and access are actually critical factors in the success of the informal sector in Uganda. The study aim was to identify gaps in the information services and to suggest solutions to fill the gaps. Its objective was to seek suggestions to fill the information gaps and make proposals to address these gaps. Ultimately these proposals could serve as a framework in planning an appropriate information system for the sector.

Therefore, the aim was to indicate views about the way forward, who should lead the way, the type of information that would be required, and in what languages, media, and repackaging. It required making known the nature of the needed information service and kind of system for information gathering and handling that would best suit informal sector requirements. This is what is considered in the next sections.

7.7.1 Can something be done to provide the Informal Sector with information?

The intention of this question was to seek entrepreneurs' views about information provision applicable to them. In particular it was necessary to establish the opinions of the entrepreneurs, if possible. It was also essential to formalize provision of information for them. The outcome was very positive. The overwhelming majority, 572 (95%) said it was possible. They even suggested that arranging meetings and organizing exposure visits and exhibitions would be very helpful ways of learning from one another. It could also give people a chance of comparing whether they are on track or not.

7.7.2 Most wanted information

This question is related to what the information needs are. But the difference is that while there could be many needs, for planning purposes, the essentials would be useful for adopting or starting an information service. Findings indicate a multiplicity of types of information that would be required most. In a descending order of importance,

information about markets accounted for 92 (15.2%), information about suppliers 85 (14.1%), information about how to start a viable business came third with 78 (13%), about money to start and sustain business 77 (12.8%), and about training 73 (12.1%). Government information about business development came sixth in rating with 52 (8.7%), information about viable businesses came seventh with 48 (8.0%), followed by news about business trends that secured 44 (7.3%). Information about how other countries with similar businesses have developed was needed by 39 (6.5%). Others accounted for 14 (2.3%) only.

7.7.3 Opinions as to the type of assistance required

Entrepreneurs were asked to make any comments that they may have on how they could be assisted to access information for operating their businesses. The following, Table VII, gives an insight into what is required.

Table VII: Suggestions on how the Informal Sector could be assisted (N=602)

Suggestions	Frequency (f)	Percent of Respondents
Organize training seminars	128	21
Provide Radio/TV programs	94	16
Provide transport	75	12
Provide soft loans	62	10
Provide cheap and reliable inputs	55	9
Encourage group formation	53	9
Open Information Center	49	8
Provide telephone services	36	6
Provide security	33	6
Provide markets	23	4
Supplementary access through LCs/area leaders	19	3
Provide cheap and reliable energy	4	1
Other	85	14
No response	21	4

NB: Respondents made more than one suggestion each.

As shown in Table VII, it is found that although entrepreneurs were very keen to receive training, their interest was more in extension services. They preferred demonstration services, workshops, and seminars as the type of training that can be conducted. They preferred information over radio and TV, and they needed transport services to be improved. Loans 62 (10.2%), availability of cheap and reliable sources of inputs 55 (9.1%), and the formation of groups 53 (8.8%) were other priority issues that entrepreneurs felt they could be assisted with. Furthermore, entrepreneurs suggested that

they needed an information center 49 (8.1%), telephone services 36 (6%), which could include cell phones, fixed booths, or call boxes, at e-rates. Communication networks needed to be expanded. Security in the country 33 (5.5%) was a very important consideration.

7.7.4 Form of packaging information

The form in which information is presented is crucial to its absorption. Wrong packaging can result in its non-use. The aim of this question was to find out from the entrepreneurs what kind of packaging of information they thought would suit them. This would take into account their personal characteristics. The findings indicate the following: first, the entrepreneurs needed information to be presented to them in factual form. At least this was the wish of 364 (60.5%) respondents. Secondly, 325 (53.9%) stated that information should be given in the form of pieces of advice. And thirdly, 307 (50.9%) expressed the need for information to be provided in the form of technical details. The other ways were in the form of news, 162 (26.9%), and in the form of opinions, 99 (16.4%). The general opinion was that entrepreneurs needed information that was as complete as possible at the time of delivery. This is why it should be factual, and complete with details. It should be given in the form of specific advice. This saves time, costs, and prevents other complications, including the need to look for more information elsewhere. It would also solve weaknesses related to information seeking among entrepreneurs.

7.7.5 Extent of coverage

Since information was expected to be factual, given in the forms of advice and in technical detail, it followed that the extent of coverage should be known. For this purpose a question was asked to find out the extent of coverage and presentation. In all, 1262, frequencies were received. This is an indication that each respondent, on average, had given two answers. The findings show the preference for exhaustive coverage. This is what more than half, that is, 395 (65.6%) respondents thought it should be. The next 162 (26.9%) stated that information should be restricted and be limited to only that which is needed. There were 149 (24.7%) who stated that information should be disseminated on a

selective basis. In short, the view was that *information* should be exhaustive and limited to use but should also be selective or presented on a case by case basis.

It is necessary to explain here that when entrepreneurs state that they prefer information to be exhaustive or restricted, it means that they only require information that can empower them to do their jobs and tasks more efficiently and effectively.

7.7.6 Delivery of information

Knowing what types of information is required most, and the form of packaging and extent of coverage of that information, it was essential to find out how the information should be delivered. In all, 1243 responses were received. This is an indication that, on average, there were two answers from each respondent. The findings show something that is typical of African societies. Almost two third of the responses, 474 (78.7%), preferred that information should be delivered mostly in oral form. This was followed by Radio/TV preference, which was expressed by 287 (47.7%). This is another way of saying that oral information services are very significant modes of delivering information to the informal entrepreneurs. The advantage is that they do not require additional skills like reading or complex technology. The printed method came third in rating 234 (38.8%) frequencies. The use of the print format in information provision is inextricably bound with literacy skills. As noted above there were a reasonably high number of respondents that had attained some level of literacy mostly at secondary and higher levels of education. Delivery of information in an illustrated manner was also strongly desired by 137 (22.7%). Visual information media has the potential to communicate where the written text cannot. Pictures take the place of words. Their use is obviously important for workers with limited or no literacy skills of which there are many among informal entrepreneurs. Illustrations also provide an alternate avenue for the literate to absorb information. The essential thing to do was to provide graphics with familiar images. Letter writing was found to be common with 99 (16.4%). The following bar chart shows the importance of each.

The intention was to map out roughly, ideas on the kind of information system that informal sector entrepreneurs feel can best handle their information needs. Three proposals were anticipated. One is that there is already an existing information system to choose from. The second, an entirely new system is expected and the third, a combination of both would be most ideal. The goal was to be a system that meets every one's needs

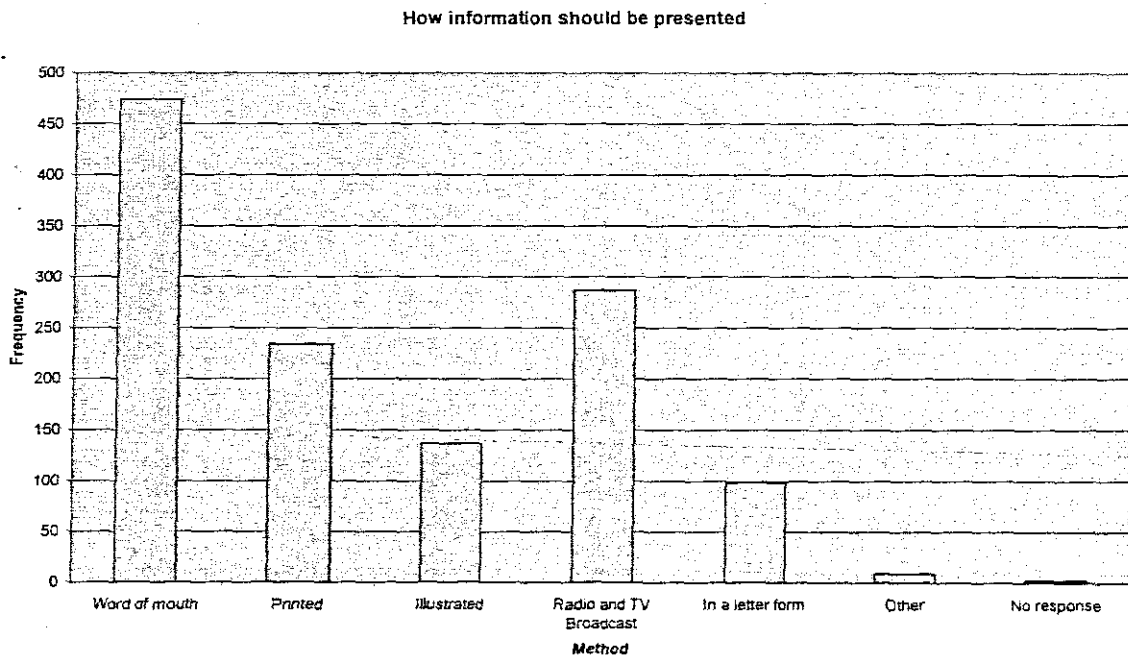


Fig. 9 : How information should be presented

The findings indicate a multiplicity of options. Top of the list are Radio and TV with 419 (69.6%), followed by an association dealing with a specific trade. This is a new trend and was rated at 359 (59.6%). This is also a new kind of arrangement although Radio has for a long time been broadcasting programs for all clients. Colleagues/friends and neighbors were rated third with 143 (23.8%) responses. Small enterprise organizations were preferred by 113 (18.7%), followed by newspapers with 109 (18.1%). Resource Centers/Telecentres constituted 67 (11.1%) of the responses. A Government ministry was rated by 61 (10.1%) responses. The Public library scored 42 (6.9%) only. Others: 23 (3.8%) opted for something else like the post office. No response was received from 9 (1.5%).

These answers bring to the fore three fundamental issues. The first one is that a definition of an information system was interpreted broadly to include facilities and channels by which an information activity can be transacted. Secondly, apart from radio/TV, information institutions and specifically the Resource Centers and Public Library appear less important to entrepreneurs. The implications for this outcome include a need for rethinking strategies for information provision and a need to be mindful of the established rating of these institutions. It may actually mean the creation of entirely new information structures, or restructuring existing information systems to absorb the information requirements of the informal sector. The third is that the human element is a central and an important feature in information activity.

7.7.7 Services required

As a planning requirement, it is an accepted principle that the system so developed or adopted should meet the needs of the people to be served. People must first be asked for their ideas and then be helped to improve on those ideas. The rationale for this is that people will feel attached to something because it is built around their needs. A closed-ended question with seventeen options was given from which respondents could select those they deemed essential or useful. The following Table VIII shows the choices of the respondents.

Table VIII: Information services needed (N=602)

Type of service	Frequency (<i>f</i>)	Percent of Respondents
Question and answer service	410	68
Inquiry (including current awareness) service	396	66
Discussion group service	309	51
Exhibitions	276	46
Demonstration service	239	40
Training on information access	194	32
Information brokerage	131	22
Trade information exchange service	126	21
Referral information service	119	20
Lending service	89	15
Public shows	90	15
Packaging of information	74	12
On-line information service	62	10
Film service	59	10
Photocopy service	31	5
Theater shows	20	3
Other	4	1
No response	6	1

NB: Respondents recommend about 4 types of information services each.

From Table VIII, the findings show clearly that a question and answer service 410 (68.1%), inquiry service 396 (65.7%), group discussion service 309 (51.3%), exposure visits 276 (45.8%) demonstration services 239 (39.7%) and training on information 194 (32.2%) are the most expected and preferred forms of services to be introduced first. As

can be deduced from the pattern, there is no reading involved directly. The emphasis is on talking and listening, discussing, and on practice that take center stage most of the time. Other, albeit important services, would include information brokerage services that featured with 131 (21.8%), trade information exchange service with 126 (20.9%), referral information services 119 (19.7%), lending services 89 (14.8%), public shows 90 (14.9%), re-packaging of information 74 (12.2%), on-line information services, film services, photocopying, and theater.

7.7.8 Responsibility of introducing information system.

Respondents were given a chance to express their ideas as to which organization they thought would best handle their information needs and introduce an information system. The idea was to gain insights and their confidence on matters of interest to them. As it were, many alternatives were proposed. A summary reveals that the preferred two options were Government and NGOs. Within government there were several proposals including ministries, government employees up to the grassroots or lowest administrative levels. The overriding factors for the choice were sustainability. They argued that although the government is always slow in implementing projects, its presence was guaranteed. It is perpetual. On the other hand, those who preferred NGOs reasoned that NGOs have big money that can see the project off the ground very quickly. But then, it was observed that NGOs are prone to changes in their programs according to the interest of funders and circumstances. The middle ground really was to bring on board all stakeholders. What this amounted to was that a long-lasting system was needed. Collaborative efforts would enhance its status and effectiveness. This is an interpretation given.

7.7.9 Management of the proposed information system

This was another planning question. The findings were also very varied but revolved around a committee and individuals. But what was picked up from 572 (95%) of the respondents is that professionals who are motivated and supported should be the ones to run it, even if an association, committee or Government were in charge of it. The choice for a professional was based on the understanding that such a person would know how to

get information, repackage it appropriately, and disseminate. The remaining 30 (5%) suggested that a radio station would manage it well. What this translated to, was that respondents were very careful to point out that knowledgeable people were essential in information management, provided that they were empowered to do carry out their functions.

7.7.10 Kind of information system

This was another stimulating question aimed at seeing how people felt about things that affect them. It came out very clearly that people are aware of what they want. A summary of findings strongly suggests that each trade wanted its own type of an information system. Fishers want the fisheries information system. Crafts want their type, but with sub-divisions, like pottery, mat making, woodwork etc. in it. This boiled down to the formation of many information systems. But on further inquiry it was found that one system would do. What was needed was the establishment of an information system in every district that would take into account all informal sector activities. Each trade would be a major subject area with sub-divisions in it. They further suggested that the system should be in a position to work together with other information systems like Radio/TV and other information centers in the country and abroad. The objective was that, in this way quality information would be gained and information sharing would be enhanced.

7.8 Summary

In spite of their personal and social backgrounds, the entrepreneurs of the informal sector are capable of identifying their information needs. These needs relate to the problems that entrepreneurs face in their day-to-day work. Training and skills, marketing, sources of inputs and/or supplies, prices, capital, transport, competitors, record keeping, and government policies were the areas in which entrepreneurs faced problems. Entrepreneurs sought information, mostly informally, verbally, through listening and talking, by contacting people who know, using personal experience, asking friends/relatives or neighbors, visiting etc. Formal information seeking was very low on their agendas. It may be speculated that entrepreneurs do not obtain information that is

developmental in nature. Development information, for most of the time, is packaged and disseminated formally, largely in printed form. Entrepreneurs are not able to access such information for a variety of reasons. Over reliance on orally transmitted information, illiteracy and poverty partly cause these problems. In addition, competencies in seeking information formally are lacking among entrepreneurs, or the institutions that provide such information are not known to the sector. The eminent challenge is to accelerate transition from the traditional modes, or to build the indigenous oral practices into modern paradigms of information seeking and exploitation. Like information pathways, information sources, systems and services used by the entrepreneurs were mostly informal. The channels are directly related to the source of information and to how information is received. A preference for informal means of obtaining information is therefore a reflection of the characteristics of entrepreneurs, the nature of Ugandan society and its level of development and its information institutions. For example, formal institutions like the Public Library, as well as other associations were found less used by entrepreneurs, whereas oral transmission was very strongly favoured. If entrepreneurs are going to enter into the development stream, they have to rethink their traditional information systems and integrate them with the modern ones that are available. The proposal being mooted here is that there is a need for entrepreneurs to be helped to become innovative within the scope of development trends.

The entrepreneurs' willingness to look for and make use of information is an indicator of the need to plan for the establishment of formal information services for them.

The next chapter, Chapter Eight, reports findings from other instruments namely: interviews with organization representatives, informants, and observations.

CHAPTER EIGHT

DATA FROM ORGANISATIONS, INFORMANTS, AND OBSERVATIONS

8.1 Introduction

This chapter presents data from interviews with representatives of organizations and informants, observations, transcriptions of interviews that were recorded and photography.

The interview schedule sought information from organizations relating to their backgrounds, their information capacity for serving informal entrepreneurs and how they assessed the information needs of the informal sector. The interview schedule appears in Appendix E. Similarly, interviews with informants sought their background, positions in the community, organizations to which they are affiliated and the capacities in which they gave information to entrepreneurs. In addition, the schedule sought their experiences about information provision to the entrepreneurs and their opinions about informal sector information needs. The instrument appears in Appendix F.

Observations were carried out using a self-participation observation schedule. The aim was to establish recurrent patterns of behaviour and relationships, to note events going on in the work environment and finally, to use the findings to verify information provided on the interview schedules. The observation schedule sought information on characteristics of business units, their locations, management systems in the work environment, relations with external environment, communication systems with the workplace and observed problems. The instrument appears in Appendix G. In order to validate some of the responses received as well as their original feeling and expressions (clichés, anecdotes and exclamations) of the entrepreneurs during the interview, voice recording in a tape recorder was made in four cases that are reproduced later.

Finally, a photographic representation of the informal sector work environments has been made to provide insight on the activities, variety and complexity of the sector in the economy. It illustrates a multiple economy in Uganda consisting of the formal/ public and

private sectors as well as the informal or people's sector in the country. Photographic records are appended in B, exhibits (Exh.1-140).

8.2 Interviews with representatives of organizations

In chapter one, section 1.5, it is assumed firstly that there are institutions in the country that are providing, or should be able to provide, information services to the informal sector. This assumption is based on the speculation that all existing public information institutions in the country, especially the Public Libraries, are sources of information for the sector. Secondly, it was expected that the sector gets information from the Government and Technical Institutes since much of the informal activities are technical. Thirdly, it was assumed that since the informal sector is a business sector, its activities would require advice, training, funding, markets, and raw materials. Similarly it was speculated that business information would be accessed from the business-related institutions such as the Ministry of Commerce, Trade, and Industry; Gender and Social Affairs; USSIA; UMA and other NGOs. These institutions were already known and targeted in the study. The objective was to identify information systems and services used by the informal sector.

On the basis of these assumptions, interviews were conducted with twenty-three representatives of organizations to elicit information. These representatives, whose responsibilities directly related with communities in which informal sector is part and parcel, were selected because information about the informal sector could be derived from them. They included: five Fisheries Officers, a Program Officer in charge of Poverty Alleviation Program (PAP) in the Office of the Prime Minister; one District Entomologist; AND one Gender Officer. It also included an Executive Secretary of the Uganda Small Scale Industries Association; an Executive Secretary, NUMA [this organization is a branch of UMA]; an Advisor of the Private Sector Foundation. Further it included Northern Uganda; Chairperson, Lira Private Sector Development Promotion Center; Vice Chairperson, the Informal Sector Association; Director, Faith Vocational Training Institute; and the Deputy Principal, Human Technical Development Training Center, Lira. Further still it included NARO Coordinator, Fish farming; the Chairperson,

the *Jua Kali* Association; the Chairman of the Kisenyi (Owino) Millers Association; three Public Librarians, Program Officer, COVOL; and the Director, Catering Institute, Lira.

The organizations mentioned above were largely involved in the implementation of development programs in the informal sector. Their relationship with the sector basically involved human resource development for the community or the implementation of programs within the communities. Above mentioned representatives were largely government employees and officials from Non-Governmental Organizations (NGOs) implementing programs aimed at helping the community, including informal entrepreneurs, in development activities.

Organizations covered in this study were formed at different periods of time. Some of them are national in character, such as government departments, and libraries, and the Private Sector Foundation. Each has different reasons for existence. The Fisheries Department is charged with the responsibility of ensuring sustainable utilization and conservation of fisheries resources in the country. The Department of Entomology is concerned with poverty alleviation, food security promotion and increase in household income through pest control and apiary development. The Public Libraries provide public library services in order to satisfy the information needs of users. The Uganda Small Scale Industries Association (USSIA) is responsible for promoting small-scale industries in Uganda. The Northern Uganda Manufacturers Association (NUMA) was established to promote industrial development in northern Uganda by adding value to natural resources such as minerals, agricultural products, and using other raw materials to manufacture other products. The Cooperative Office for Voluntary Organizations (COVOL) is aimed at encouraging conservation of indigenous woodland through improved processing of shea nut butter.

Data was presented according to the structure of the interview schedule, which has three sections. The first section sought background information about the organizations themselves. The second section investigated the capacity of organizations to disseminate

information to the entrepreneurs and the last section sought information needs of the sector from the viewpoint of the organizations.

8.2.1 Support services provided to the Informal Sector

Representatives were asked about the kinds of support services that their organizations provide to the informal sector. Answers were as varied as there were organizations. However, data analysis revealed that all organizations provided extension services of one kind or another. The most significant services provided were training, advisory services, lobbying and advocacy and information. Regarding training, emphasis was placed on skills development, how to market products, reduction of post harvest losses, nursery management, proper use of tools, and other inputs. With regard to lobbying and advocacy, it was reported in one case that there was no electricity in the Lira District in 1995/6, but after a period of struggle, the service was restored. This was one isolated case when lobbying and advocacy paid dividends. Advisory services related to sources of funding, areas of investment, use of proper fishing gear, prices, fish-handling techniques, government policies applicable to different trades and to information provision. Information materials were provided and discussions were held at the places where information was disseminated.

Regarding the provision of information, all (91.3%) but two representatives (8.7%) said that they disseminated information to entrepreneurs using multiple channels. The channel chosen depended on the nature of the group and the type of facilities available in a particular area. However, the most common methods were word of mouth, letters, and distribution of publications, using cell phones, through workshops and use of radio transmission.

8.2.2 Information provision

The representatives were asked whether their organizations provided any essential information to the informal sector. The answer was overwhelmingly in the affirmative (86.9%), although some (13.1%) said they did not. Those who said that they provided essential information stressed that everything that they did involved information as part

of the package. For example, fisheries officers said that they gave fishermen information about how to catch fish using the correct gear, and modern technology such as chalker kilns, better fish handling methods etc. The manufacturers mentioned that they provided information about current market opportunities and prices, including funding sources, information about potential areas of investment, and any other business and technically related information that might be required from time to time or what the organization considers essential for the sector. The COVOL, a non-governmental organization based in northern Uganda, disseminates information on the conservation of trees, harvesting, manufacture and marketing of shea nut products. Disappointingly, the public librarians did not know the exact nature of information required by the informal entrepreneurs. They claimed to have seen metal workers and poultry keepers read books and magazines in those subject areas in the library.

8.2.3 Information delivery

Western models of information transfer put emphasis on the use of print and electronic/digital channels. It emerged from the study that most information was delivered orally by word of mouth, while some information was transmitted by means of telephones, letters, and publications such as newsletters and brochures. Occasionally, the radio was used to broadcast information to the people, including entrepreneurs. A multiplicity of media, dominated by oral presentations, was used at public gatherings, workshops, meetings, demonstrations, seminars and training sessions.

8.2.4 Information sources

It was curious to establish the sources of information transmitted. Analysis revealed that 20 (86.9%) of the respondents received information from the organizations that they belonged to and /or with which they were cooperating. This meant that some form of networking and collaboration was going on between these organizations and others. For example, NUMA was getting some of its information from Private Sector Development Foundation, UMA, and USSIA. Government departments at district level obtained information from the ministries headquarters such as Local Government, MAAIF, Finance, Planning and Economic Development, Trade and Industry, Gender, Labor and

Social Affairs, Prime Minister's Office and research institutes. In some cases the ministries sent information directly to local government departments as part of their routines. Once information was received, government officials repackaged it and sent it to the targeted groups. Fifteen (65.2%) representatives stated that they had received some of the required information by means of reading published books, journals and newspapers, while some of it was extracted from formal meetings, re-packaged and sent to the people.

Close to that question was the issue of the most reliable sources of information. It was found that certain organizations relied on the same partners mostly, although there were some, such as the Public Libraries, the Fisheries Department, and COVOL that had connections abroad from where they obtained information. These organizations were also able to generate information themselves. The Public Libraries Board falls under the Ministry of Gender, Labor and Social Development.

8.2.5 Information services

Several information services serve the informal sector. In this section it was crucial to determine specific information services provided to the informal sector and the services found most appropriate. Direct, oral communication with the target groups was found to be the most popular method. Other services mentioned included radio programs, extension services, telecommunication services such as facsimile and telephone, borrowing information materials from information centers, use of reading rooms/facilities, reference and referral services, photocopying services, use of computers for e-mail and internet and postal services. NUMA, the Private Sector Foundation, for instance, had the necessary technical facilities and information units that were accessible to entrepreneurs.

Proposals were sought from the representatives about the best way to serve the entrepreneurs. Many ideas were suggested, but the three strongest suggestions included the establishment of an information infrastructure, providing more facilities and resources and the provision of advisors skilled in information management. For example, the

librarians provided information through the public libraries; NGOs, through resource centers or information centers, which also provided access to computers and limited access to e-mail and Internet services. Some NGOs, including the Private Sector Foundation, COVOL and NUMA, had budgets for information activities. The Government also had an elaborate infrastructure in terms of transport, libraries, manpower, office facilities, broadcasting facilities etc. for distributing and disseminating information.

8.2.6 Information needs of entrepreneurs

Based on that background, the inquiry entered into a survey of the organizations' knowledge of the information needs of the informal sector from their vantage point. The first question was aimed at finding out the types of information that the entrepreneurs in the informal sector required most frequently. No uniform answer was given, because the sector consists of several trades and therefore answers tended to focus on a particular trade. For example, fisher folks were frequently asking why fish was becoming scarce, and why the fishermen were prohibited from using small nets. They also wanted to know why they were prohibited from fishing in fish breeding grounds. The farmers of shea nuts were mostly inquisitive about how to best store nuts, how to process the nuts, and about the marketing of shea nut seeds and /or oil. Poultry keepers were keen on any information that had to do with good poultry keeping, marketing and the diseases of chickens. Sisal farmers were interested in appropriate technology for cleaning sisal and markets for sisal products. Small-scale industrialists were after technical information, including information about metal work, designs and related information. The entomologists mentioned that apiary keepers mostly needed information on the marketing of honey, wax and other bee products. Technicians were inclined to ask about where spares could be found quickly, implying that something should be done in order to bring the required spares nearer. Common requirements that frequently emerged from questions across the trades included information about markets, sources of credit, ways of improving the products, loans, and where to receive free advice. It is significant that some organizations, particularly technical institutions, fisheries, and the Private Sector Promotion Center, reported that certain informal entrepreneurs did not realize the value

of information as they rarely sought it. Therefore, the demand for and supply of information to such organizations was low.

Closely related to the aforementioned area of investigation, was the question about the type of information that was only sought occasionally. The purpose was to distinguish between urgent information needs and superficial needs. In economics, a need is backed by the ability to achieve what is needed, whereas something superficial is an expression of a wish, or a desire that may or may not be fulfilled. From the experience of organizations, entrepreneurs occasionally asked specific questions regarding problems affecting particular trades. For example, fishmongers asked when the government would improve roads to landing sites to ease quick transportation of fish. In libraries, some people looked for specific pamphlets dealing with their interests. NUMA occasionally noted a need for assistance with proposal writing in order to secure funding, or requests for information about joint ventures, export markets and appropriate technology. A catering and bakery institute often dealt with potential candidates who wanted information about training: how long training lasted, the fees to be paid, and employment opportunities after qualifying. The Entomologist reported that beekeepers often wanted information about prices of honey and other bee products during different times of the year, and also prices from the export market's point of view. Upcoming small-scale industrialists often needed information about joint ventures and export markets. It is important to report that what other organizations expressed as "occasional needs" were often found to be the actual needs of others. That is why specific examples are highlighted.

8.2.7 Languages

Equally relevant was knowledge about the languages that entrepreneurs used to express themselves when seeking for information from organizations. This question was important because it is believed that information is best understood in the language in which people are proficient. Secondly, it provides a gateway to understanding the choice of language(s) that would be most applicable to an information system for the informal sector. Failure to consider this at the initial stages of information service development can

lead to prescribing and establishing a non-usable system. From this question it emerged very clearly that entrepreneurs preferred information to be given to them in English and/or the local languages. Organizations, likewise, provided information orally in English and in local languages. In print they usually used English. Kiswahili was used to some extent. In Uganda, English is the official language, while Kiswahili is the national language. It is worth clarifying that English, Kiswahili and other indigenous languages are recognized in the country's constitution.

8.2.8 Formats of presenting information

Organizations were also asked to state the formats in which they gave information to the entrepreneurs. The outcome was that information is mostly disseminated orally and in printed form. However, 17% of the organizations sent information through letters and the electronic media. They were also asked where entrepreneurs would be referred to in case an organization was unable to satisfy the information needed. This question attracted different answers. Three representatives of the training institutions and COVOL said that their offices were terminals and so no further reference would be made. The Private Sector, NUMA, Public Libraries, Fisheries, and USSIA relied on networks and collaborating agencies. Government departments at the district level tried to find information for the clients from the headquarters of the parent ministry and local institutions in the area. Information was also sought by means of physical visits to the ministries and by asking other organizations for information that would be relevant to entrepreneurs. On some occasions joint meetings comprised of government representatives and NGO leaders were held where information was often generated and shared.

8.2.9 Constraints in information provision

It was equally important to find out from the provider agencies what constraints they faced in acquiring and delivering information to the informal sector. Problems included the lack of suitable books in various fields of interest to the informal sector; illiteracy was cited across the responses, and inadequate communication services, especially telephones in the rural areas, was reported as a big problem. The language barrier was a major issue

because most information is produced in foreign languages that people do not know and understand. Information materials were difficult to acquire due to lack of funds and low priority was given to information in budgeting and by the people themselves. Other weaknesses included the fact that information materials received as donations from various organizations do often not meet the information needs of the clients – they were therefore irrelevant. There was a lack of money to buy the required materials. Access to international information was reported to be costly. There was a limited capacity among partners to meet the information needs of various stakeholders. Mobilizing people was reported to be very difficult, because rigid customs are difficult to change. In some cases it was difficult to know where the required information could be found. Farmers did not use information directly.

8.2.10 Attempts to close the information gaps

It was encouraging to note that organizations tried to do something to get information needs fulfilled. A summary of the findings indicates that organizations relied on the Government for information by requesting the relevant ministries to supply information to them. Other measures used by them included the gathering of entrepreneurs at seminars, workshops or meetings. In organizations like the Owino Millers Association, where information reception was rated lowest, the chairperson would switch off power so that nobody would be able to grind. In that way people would come to hear what is being told to them. Another strategy was to keep passing on information in the hope that somehow it would be diffused. Furthermore, networking and collaborating with other organizations filled some gaps. Internal capacity building was also another way. Significantly, organizations like the Private sector Foundation, NUMA and Government Departments were training people on how to access information so that these people could look for information themselves. Meanwhile, it was encouraging to note that since the Government of Uganda had liberalized its economy, the communication industry had improved tremendously. Cell phones were the most visible items of communication among the population, including some informal entrepreneurs. There were over 50 FM Radio Stations and 10 TV stations operating in the country at the time of the study. Organizations and people were using these channels for information dissemination. There

are many courier services than ever before and the transport industry has also been liberalized. It is now much easier to send parcels using the bus services and people can also commute much faster between various parts of the country.

8.2.11 Suggestions to improve information access

Solutions were sought to the constraints. Recommendations made by the representatives of these organizations were as follows: that Government should increase its involvement in information dissemination either by increasing funding, or other support. There is need for an integrated approach to development so that information can become a number one component. Capacity building is essential, especially with regard to improving the information infrastructure and to establish human resources structures that are capable of understanding the needs of the informal sector. Repackaging of information in local languages was considered essential. Educating people to understand the value and utility of information is necessary. Promotion of library services or resource centers was also considered to be vital. In this context these institutions would be required to design their services in line with the requirements of the users, paying particular attention to the interest groups.

8.2.12 Suggestions for sustainable information delivery

Finally, organizations were asked to make suggestions for sustainable and efficient information delivery to the informal sector. This was found to be a difficult question because it, quite correctly, occurred to them that the question needed short-term and long-term solutions. The respondents offered the following short-term solutions. Regular sensitization of the informal entrepreneurs in order to get across the message that information was vital for their activities. Field trips were seen as essential as a way of learning by seeing. Improved organization in associations was called for. Through these groups it would become easy to send information in bulk. Increased use of the radio and other mass media was recommended. The need for skilled information workers capable of selecting relevant information materials was stressed. Repackaging information would be a way forward. Educating information users was important. For the long term, they requested that the Government should make an effort to improve communication

countrywide. The Government should therefore develop partnerships with the private sector and use the existing information infrastructures for information delivery. A rather awkward but interesting suggestion for a poor economy such as Uganda was that people should in future begin to pay for information so that they can buy exactly what they need. In this way a focused information service could be built. There was need to publicize information institutions so that people could know what was available and where it could be found. The development of capacity should include ICT with all the related services and there was an urgent need for this. The expansion of the existing public information systems should include categories of people not catered for already. This would be an appropriate solution to the current situation.

8.2.13 Summary on information issues

Information capacity assessment within organizations

- The study reveals that many organizations deal with the informal sector. Specific areas include extension services, training (skills development, how to market products, management of businesses, use of tools); Advisory services (sources of funding, potential areas of investment, pricing techniques, government policies); lobbying and advocacy, information provision and services. Some organizations did not deal with the informal sector after their students had qualified nor did they organize any continuing education workshops for those who had qualified. This was especially the case with technical schools.

Information needs of the Informal Sector as expressed by organizations

- Center on training, marketing, funds, areas of investment, appropriate technology, ways of improving products, inputs, sources of credit, advocacy and lobbying, advisory centers, and pricing techniques.

Information sources used by organizations are used:

- to support the informal sector with information. These include information internally generated by themselves, information from partners, use of libraries, getting information from Government departments in the case of NGOs, Research institutions, NGOs (civil society organizations), accessing from abroad, and from personal experience of information disseminators.

Channels used for providing information

- include: word of mouth, letters, provision of literature, use of cell phones, addressing the sector at meetings, conducting seminars and workshops, using the radio, holding demonstration classes

Information services provided by organizations

- These include: talking directly to the people, radio programs, extension services, referral information services, use of computers, communication services such as fax, telephone, e-mail and internet, photocopying; and writing proposals for them.

Constraints to information provision

- Whilst organizations are able to get and give information to informal entrepreneurs, they face problems in this area. These problems include a lack of suitable books in libraries, language barriers, expensive information materials and, low priority accorded to information by organizations in budgets. The donated materials are not suitable. There is no money to actually buy information materials, accessing international information is expensive. There is limited capacity among partners to meet informal entrepreneurs' information needs. Mobilizing informal entrepreneurs is difficult to do, as they are hard to convince and information required specifically is difficult to locate.

Suggestions to improve information delivery to the Informal Sector

- To overcome some of the problems that the Informal Sector faces, organizations recommend that there should be regular sensitization of informal entrepreneurs. This should be in the form of arranging of field trips, formation of associations to make it easy to distribute information, increased use of radio services and the mass media, the publicizing of information institutions, and the development of user-friendly ICT. In addition, the Government should actively involve itself in information production and dissemination and in the forging of partnerships among organizations. It is furthermore important to gain access to local information and to avoid duplication. In this regard, internal capacity building was needed, including information and communication technology, networking and collaboration among themselves to fill gaps, training people in information access. Information brokerage was also seen as important, along with the

provision of information in English and repackaging in local languages. Other considerations included educating people on the value and utility of information, promoting library and information services, and an integrated approach to development, so that information dissemination is given the priority that it deserves.

8.3 Interviews with informants

Informants were people who occupy important positions in their respective communities. For example, they included chiefs, local councilors, elderly people, chairpersons of social groups etc. They were targeted because of their knowledge of the communities that they were part of. They were expected to have a wide experience and knowledge of the informal activities going on in their communities because they have direct access to information that society, including entrepreneurs, need. They were community leaders with vast experience about their localities. And some of them were informal sector entrepreneurs themselves, as well as opinion leaders, local chiefs and public figures. Contact with the informants took place before the main interview was conducted. A total of thirty-five informants were interviewed. They included five Resident District Commissioners (RDCs) or their Assistants, five civil servants, five local area councilors, and twenty opinion leaders.

Resident District Commissioners and their Assistants (Deputies, Assistants, and Security Officers) are appointees of the President and represent and report to the President in their respective districts. Other informants were persons within the study areas. The civil servants, for example, were extension agents, and so they knew which areas would yield the required information and therefore guided the researcher and his team to those areas. Local politicians and local councilors were considered to be important personalities in their respective localities. Most of them were people with multiple responsibilities in their respective communities. For example, when someone was interviewed as an opinion leader, the same person could be found to be an area councilor as well as being an entrepreneur. This dramatically reduced the number of informants, many of whom* were preferred as main respondents because of their wide exposure to the trades.

The study covered the rural areas, urban centers and fish landing sites. The identified informants were interviewed by following a prescribed interview schedule in appendix F. The schedule had three sections. Section one required background information on the informants. Section two was concerned with information provision and utilization while the last section sought opinions about the informal sector information. All data is presented in the same way that the schedule was constructed.

8.3.1 Background information

The first question sought the responsibilities of the informants that would bring them in contact with informal entrepreneurs. It emerged that job responsibilities were as divergent as the trades found within the sector. Even their departmental affiliation was diverse. Regarding where they encountered the entrepreneurs seeking for information, it became evident that such places varied according to trades and circumstances. For instance, fisher folks were given information at the landing sites, markets, or during seminars and local council meetings. Fish farmers were given information in their homes where the fishponds are located. For the craft people, information was given in crafts shops and markets. Local councilors disseminated information from their homes.

8.3.2 Trades

There was interest in finding out from informants what types of informal activities people engaged in, in their places of work. The consolidated list of these activities is as follows: Arts and crafts include wood carving and etching, pottery, mat making, rope making, fishnet making, basket making, knitting, weaving, making of table wear and tailoring, cloth dyeing and batiks, the making of posters, graphic design, painting and decoration. Food processing includes: beer brewing and distilling alcohol, grain milling, portable restaurants, cookery shops (eating houses), confectionery, food hawking, fishing and fish mongering, bee keeping, baking, meat selling, poultry keeping, oil processing, coffee processing, and trapping grass hoppers. Metal fabrication includes: blacksmithing, welding, auto repair, battery charging, car wiring, panel beating, spraypainting, wheel alignment and mending. Woodwork trades include: carpentry, and pit sawing. Construction trades include house construction. Social services trades are: hair dressing,

laundry, car washing, market vending, small retailing, photography, photo framing, rubber stamp making, running of clinics, video shows, postal (courier services), bicycle repair, key cutting, traditional healing and traditional medicine trade. Shoe trades are: shoe making, shoe repair and shining. Technical services include watch repair, electrical appliances repair, electronic (radio, TV, refrigerators, deep freezers, micro ovens) goods repairs, printing and binding. Retail trade includes activities such as charcoal selling, fresh foods, firewood, antiquarian book selling, hawking, processing hides and skins, selling music tapes, spare parts, drug shops, medicinal herbs, running market stalls, verandah and pavement trades, selling general merchandise, newspapers. Transport services include carting of goods, touting and luggage lifting, driving and *boda boda* transport. Off-the-farm activities include brick burning, brewing and distilling of alcohol, sisal growing, pot making, hunting, piggery, traditional birth attending, sugar cane growing, charcoal burning, petty trades, blacksmithing, mat making using papyrus, bicycle repair and stone crushing. This question enabled the study to capture the nature of the sector by analyzing the activities as reported by the informants.

8.3.3 Information needs of informal sector entrepreneurs

Informants were asked what questions the entrepreneurs usually asked them or what types of information were required from them. The idea behind this question was to distill the information needs of the informal sector entrepreneurs using the experience of informants. The information needs were: information on marketing strategies and marketing opportunities, how to improve the quality of their products, how to minimize production costs, production processes, and sources of capital (loans) for starting and expanding businesses. Others often asked questions about what government could do for them to uplift their standards of living, how to improve performance and minimize risks in the work settings, where to access tools, and why prices kept fluctuating. Some questions included concerns voiced by fishermen who were worried that fish catches were dwindling and that there was a high rate of net thefts on the lakes. Some of the questions voiced complaints, for example, hawkers, blacksmiths, charcoal burners, and fisher folks complained about paying for licenses and being harassed by officials while they were conducting their small business practices.

8.3.4 Types of information that informants give to entrepreneurs

Closely related was the question that sought understanding of the types of information that informants often gave to their clients. The overall answer was functional information. This implied information that would enable entrepreneurs to improve their activities. This type of information included information on skills development, directing them to *organizations that provide loans, recommending them to those who matter, emphasizing the importance of having an operating license, and encouraging them to attend meetings where issues affecting them would be discussed.* As to the format in which information given, they stated that in most cases information was mainly transmitted orally, although there was evidence of sending this information in written and printed form as well.

8.3.5 Information sources used by informants

As conduits of information, it was essential to establish where informants obtained the information that they gave out. The most immediate source was their own experience *and the knowledge that they had accumulated over time.* This was an area where indigenous knowledge came to the fore. Other sources reported were government departments and officials, newspapers, NGOs and other institutions, and training sessions. The question was posed as to how they obtained that information, seeing that informal communication was very important to them. By observing everything that seemed to be relevant and successful, and relaying it to others, they were able to provide good information. Participating in discussions during seminars, meetings, and consultations with those they knew were important, proved to be another important source of valuable information. They were also asked about what they would do if they did not happen to have the necessary information. This question was asked with a view to finding out whether there were networking arrangements among information providers and informants. Informants were indeed able to confirm that they sent entrepreneurs to relevant institutions that they knew could provide the correct information and advice.

Much as the informants were able to help entrepreneurs with information or could direct them to places where they could be helped it was, nevertheless, important to ask whether they encountered any problems in information provision. It came out clearly that there

were many problems. The Informants said that they normally experienced entrepreneurs, and especially fishermen, would seldom follow advice. They would complain that they do not have time to listen to fisheries officials. Many of the entrepreneurs were apathetic, semi-illiterate and resistant to positive change. Some were located in far-off places – a factor that made most of them lose out on information. Unexpected was the stigma of tax defaulting. Defaulters evaded places where they could get information easily. This category relied on friends for information or stayed uninformed.

8.3.6 Opinions on information delivery

Having exhausted that line of inquiry, attention was shifted to opinions. Informants were asked what methods of information delivery, in their view, could help people in the informal sector. Responses were wide-ranging but within the scope of the study. The informants suggested that information should be brought directly to where entrepreneurs worked. FM radios should be extensively used to air appropriate programs. Places of worship were important places for disseminating information. Newspapers in local languages would do a great service. Public libraries should be established in places where there are none. Government officials should be active in sending out information. Oral delivery through meetings, workshops and seminars were more practical and letter writing was convenient for individuals.

8.3.7 Information sources helpful to entrepreneurs

What sources, therefore, could help the informal sector? Informants cited the following: customers, places of worship, Government, NGOs, themselves, and local councilors. These were given as the most important sources of information for the sector.

8.3.8 Role of information in the Informal Sector

On the role of information in the growth of the informal sector, informants were unanimous that information has an important role to play. As a matter of fact, the well-intentioned respondents suggested that information was paramount and should not be underestimated because it played a very important role throughout the population,

including the so-called formal sector. Information helped them to understand what affects them at all times.

8.3.9 Constraints to information provision

If information was that precious, would they be aware of constraints that they faced in providing it to the informal sector? Experience was used to answer this. Their comment was that there were many constraints, from the receivers' end, from the providers point of view, while the resource itself created problems. It was worth exploring this a little more. From the recipients' angle, the following were cited as problems: Apathy to information provided to entrepreneurs resulting in low sale of products, information illiteracy whereby information is considered a waste of time, actual illiteracy, ignorance and vicious poverty. Wrong timing of information by information providers, especially Radio Uganda, the inferiority complex of the entrepreneurs, and the inherent attitude of selfishness among some entrepreneurs were among some of the problems cited. From the providers' point of view, problems that were cited included wrong language for communication, lack of transport to carry information regularly. In addition other problems included inadequate number of trained information workers able to work with informal entrepreneurs, lack of a central place to get all the information required, and an underdeveloped information infrastructure in the country, in general. The truism that information is expensive was also stated. It involved travelling or sustaining an information unit, like a radio station. Cell phones were expensive and attractive to thieves. Most information was provided in a foreign language source, which excluded most of the entrepreneurs.

8.3.10 Suggestions to improve information provision to the Sector

What therefore, did they have in mind to improve the information gap? Improvement of functional adult literacy was the most important suggestion. They contended that, once people are able to read, write, and count properly, their minds opened up. They then tended to behave rationally and they came to see sense in buying radios and newspapers etc. as important assets. But since formal education took a long time to attain, they suggested that, as a short-term measure, sensitization workshops and seminars were

necessary. Government should increase the publication of information in local languages. As information providers, local government should recognize them, the informants, by giving certain incentives, such as small cash payments. Use of FM radios for essential programs should be increased so that information could be broadcast and not music only. Government could pay airtime and help to keep these radio stations working appropriately. Other important considerations were that the informal sector entrepreneurs should organize themselves into groups so that it would be easier to provide information to them properly. And members of the informal sector should help themselves by training their literate members to become Trainers of Others (ToO).

8.3.11 Ideas on Informal Sector development

At this stage it was necessary to informants' opinions about how this sector could be developed. Many suggestions were made. These included their most pressing problems. Informants stated that entrepreneurs required training or skills-development, loans, markets, tools, and raw materials.

8.3.12 Proposed information system for the Informal Sector

Finally, they were asked to put forward an idea of the type of information system that would be suitable for the sector and, how that system could be run. Firstly, with regard to the system, it was suggested that the sector should be recognized as a vital component of development. Secondly, a census and registration of informal entrepreneurs should be done. Thirdly, entrepreneurs should be impressed upon to organize themselves for recognition. On that basis, an information system that caters for each category of trades could be established by the entrepreneurs themselves, and in their respective places. However, it was realized that there were likely to be many such information systems. It was therefore suggested that one information system could be established to collect information material serving all types and trades. They envisaged that a business advisory and information center would be a better option. Support by Government and NGOs was called for along this line of action. The level of education of members and the sustainability of the information systems were major considerations according to them.

8.3.13 The information issues

- Informants know the informal sector quite well.
- Informants are people who work closely with communities and are themselves opinion leaders and entrepreneurs in the informal sector.

Information needs

- Need for information revolves around markets, marketing strategies and opportunities, capital or credit sources, access to tools, prices and pricing techniques, production processes, and skills development.

Information sources

- Sources of information used by informants for the informal sector include: Government departments, NGOs, places of worship, local councils, customers, personal experience and knowledge, newspapers, training sessions.

Methods of information delivery

- Methods of delivering of information to the informal sector include: talking to them directly, using radio, places of worship, public libraries, government officials, newspapers in local languages, meetings, workshops and seminars.

Constraints to information provision

- Problems that informants face in information delivery are low absorption and adoption of information, ignorance of some entrepreneurs, and apathy to information. Also illiteracy including information illiteracy, wrong timing of information, negative attitudes, inferiority complexes, poverty of their clients such that they do not listen, and selfishness with information among entrepreneurs were cited as constraints to information provision. Further still lack of transport to disseminate information regularly, wrong language of information delivery, no central place for delivering and receiving information, underdeveloped information infrastructure in the country, few trained information workers, distances from people with information, tax defaulting (such information areas are avoided) were other problems.

Improving information delivery

- Improving information delivery would require functional adult literacy, seminars and workshops, more newspapers in local languages, regular meetings, workshops, consultations, research on specific areas of information need, packaging information appropriately, training in information literacy, increasing transmission modes.

Development of the Informal Sector

- Suggestions made are: training of entrepreneurs, accessing them with soft loans, improving marketing of various products locally and internationally, increasing availability of tools, supply of information about raw materials (especially those imported), and development of information institutions.

Information delivery systems

- Proposals included the establishment of the following: Arts & crafts information system; Construction and allied trades information system, Fisheries information system, Food sector information system, metal work information system; business information system. In other words each trade needed its own information system and this was likely to be unwieldy. They suggested that a Business Advisory and Information System would be ideal.

8.4 Observations

Observations were carried out at the same time that the interviews were conducted. The purpose was to establish what was taking place at the sites of study. The emphasis was on seeing the informal sector through the eyes of its actors. Particular emphasis was paid to systematic noting and recording of events, behaviors of informal entrepreneurs while at work and more particularly the information seeking behavior, products and artifacts in the settings of the study. Attention was also paid to location of businesses, hygienic conditions, infrastructure existing in work places, the appearance of the workers, any record keeping practices seen, tools available, and the numbers of employees. Observation enabled the understanding of behaviors and meanings attached to those behaviors. The unobtrusive observation technique was applied. The aim was to determine

the information gathering, communication and information use habits of the entrepreneurs. More specifically, observations were aimed at determining the recurrent patterns of information-seeking behavior and entrepreneurial relationships at workplaces and, to use what was observed to verify responses from other instruments. The observation schedule appears in Appendix G.

Responses are presented according to the trades. This arrangement was made to give a unified picture from each category. And because an observation schedule was used, responses are likewise presented according to that arrangement. At the end of each trade, an information aspect is given.

8.4.1 Garages. Observations revealed that garage trade was an urban activity. The infrastructure for the business differed from place to place. This ranged from permanent structures to the open air or under the shade of trees. Quantities of tools used also varied, but the main ones were gas welding sets or plants, hammers, greasing equipment, assorted spanners, spraying jets, grinders, battery chargers, cash files, pliers, jacks and latching machines. Artifacts seen were engine blocks, or differential housings, old and crashed vehicles, disused tyres, oil cans, old vehicle parts, old batteries, oil gaskets and other scrap. Activities going on were panel beating, spraying, electrical wiring, wheel alignment, general car service and maintenance, engine overhaul and engine assembling. The products were serviced vehicles. Inputs were body filler, grease, oil, thinner, sand paper, spare parts, paint, wires, tape and the skills of those involved.

Hygienic conditions were both good and bad. Garages in the centre of towns were found to adhere to a high degree of cleanliness. But as they move out of town, that is, in suburban areas, the conditions were appalling. Most work places were crowded, oil was spilt all over the place, and generally these premises were badly maintained. Characteristically, the garage business was carried out by the road side.

Management styles depended on ownership. Where ownership is by single management it was centralized. Where it is represented by a consortium of skills, each manages his

own part and at the end of the day one would pay commission to the owner of the garage. The number of employees was not easy to estimate because these people keep moving in and out testing vehicles, looking for spares, etc. It could, however, be stated that the average number varied from three to thirty.

Many mechanics were found to be wearing their own clothes although these have also turned greasy and dirty. Garage work is a male dominated activity. Relations with customers were found to be good because the customer is 'king!' Pricing of products was negotiable and depended on how regular a customer was. The terms of trade are certainly cash but there are situations when credit could be negotiated. Product marketing strategies depended on the garage space. Display outside a workshop, and test runs are methods of approval.

Problems observed in garages included that they are often badly developed and crowded. Those operating under trees or in the open air suffer a lot when it rains or is hot. Most garages were located in poor surroundings without proper safety facilities. (see Appendix B: exhibits 74-80).

Information

Licenses were displayed in the offices of the established garages only. Record keeping was practiced only by established entrepreneurs while the poor did not. Oral communication, use of cell phones, conversation, consultation with each other, and direct consultation with customers are common methods of communicating. Information was sought when seeking spares, seeking help, seeking and receiving instructions, or other related issues.

8.4.2 Woodwork. This trade is very prominent in urban areas although it spreads to rural areas as well. The general observation is that most of the woodworkers operate in temporary workrooms, verandahs, backyards of houses in urban centers, or old houses. In rural areas they were mostly found under compound trees.

Tools used included latching machines, planing tools, hammers, chisels, squares, saws, vices, oil stones etc. Artifacts included wood bits, wood shavings or litter, sawdust. Products were many and included doors, beds, windows, tables, benches, cupboards, shutters, sideboards etc. Inputs were nails, wood glue, varnish, palm threads, cloth, sponge mattresses, upholstery, timber, sacks, sand paper.

Hygiene was found to be very poor in most of the workshops visited. Those located in the centers of towns were certainly well kept. Most of the woodwork or carpentry shops were located by the roadside. Many exhibited a decentralized management style with the number of employees ranging from 2 to 20. All of the employees were above eighteen years of age. Like mechanics, few wore overalls and other protective clothing. Most of the workers were males. The reason for this was that the trade requires a lot of energy. In finishing operations, women were actively involved. The expressed reason was that women care a lot about themselves and therefore their make-up showed their very best. So, this was assumed to be applicable in workshops also. As far as licenses were concerned, there were as many entrepreneurs without them as there were those without them.

Customers were found to be mainly individuals although government institutions and representatives of NGOs were seen in some workshops. The method of pricing products was not easy to determine. But price negotiations could be seen going on between producers and customers. Terms of trade were basically cash and credit. Product marketing strategies were quite many. Display was the common method of promotion. This could be done in front of the workshop, in a show room, by the roadside, under trees where the workshop was located or under verandahs. As usual there were smiles when a customer arrived.

Problems identified in woodworking included workshops operating under tree shades, unhygienic environment, low volume of sales, inadequate storage facilities, crowded work places, old and inadequate tools, lack of protective clothing like muffs, gum boots or gloves. It was also experienced that some of the woods were so smelly that they even

caused allergies. Types of these woods used included *mpeirwe* and *mvule*. (Refer Appendix B: exhibits 26-33).

Information

Information gathering techniques included consultations with each other, telephone conversations, talking with customers, and visiting peers. Communication channels were basically through the word of mouth and telephone links. Languages in use were local languages, Kiswahili and English. Communication patterns were really interpersonal. Information use was seen in the activities. This was mostly in receiving or asking for instructions, seeking advice, seeking sources of materials or markets, asking about the time when the customer would come back to find the item ready, negotiation of prices and in confirming arrangements that one was not sure about.

8.4.3 Battery charging is basically an urban job carried out both as a separate business or as part of the garage's work. Charging batteries required a house with electric power. Tools for the trade included the battery charger itself, voltammeter, hydrometer, pliers, hammers and spanners, connectors, and funnels. Artifacts included old batteries and battery cases. Inputs to battery charging included sulphuric acid, wires, electrodes, distilled water, and plates. In general the hygienic conditions in battery charging operations were fairly good, although acids smelt terribly. The work-related appearance of entrepreneurs was found to be both professional and ordinary. Professionals wore lab coats and had well-managed working spaces. Women were surprisingly found to be increasing in number in this trade. Obviously, car owners were the customers. Battery charging was such a cheap business that it costs one dollar to charge two batteries. Business marketing strategies included the use of signposts indicating the location of the activity, display in the workroom and a guarantee that if a battery fails to work within four days, the customer is advised to return it. Observed problems included dumpy workrooms, and it happened to be that some of the workshops were actually residences. This was found to be very dangerous (Refer to Appendix B: Exhibit 78).

Information

Information-gathering techniques included consultations among the entrepreneurs themselves and with customers, and receiving information directly from manufacturers or friends. Channels of communication were word of mouth mostly. Telephones were used too. Local languages prevailed and, to some extent, English. Information use was seen when customers were explaining the problems concerning their batteries, arrangements about when the battery would be ready, clearing of doubt, seeking advice. Record keeping was done in some cases and not in others.

8.4.4 Arts and crafts. This is both an urban and a rural trade. Most artwork was done inside rooms although they may be poor. Crafts work was mostly carried out at home and under trees or verandahs. Tools of the trade were worktables, screen frames, brushes, metal sheet, cloth, stencils, and spray jets. For crafts, the tools included knives, pangas and needles. The artist's artifacts included paintings that owners have failed to take, incomplete jobs, a collection of paint tins etc. Activities carried out included dyeing, printing and signpost painting. Products were signposts, badges, T/shirts, etc. Inputs were oil paint, stencils, turpentine and soap. Hygienic conditions were a little better than other activities, in general. Locations differed from place to place. While some operated at roadsides, others were in rooms depending on the capacity of individuals. The number of employees was usually small, with an average of one person per station. Customers were individuals, government institutions, companies, and NGOs. Product marketing strategies included displays inside workrooms, or outside, in the case of signposts. The relationship with customers was found to be good. Products were sold for cash, for there is a saying that, "he who sold on credit withered away. And he who sold for cash lived tomorrow". It was precisely this fear of withering away that forces artists or business people to stick to cash most of the time. Problems observed in work places included crowding and paint splashed all over the rooms making them untidy to me as a non-artist. Crafts people make chairs, wood carvings etc. (Refer Appendix B:exhibits 1-25).

Information

Information gathering was by consultation with likely institutions, observation around towns, inquiries with authorities, keeping an eye on advertisements in the press, seeking their services and setting up a wide network of friends without those skills. Information was used in marketing, pricing, looking for contracts, and looking for inputs, and keeping records.

8.4.5 Tailoring is a craft that spreads in urban and rural areas at the same time. It is a vocation for both males and females. Much of the activity in rural areas is done in homes, markets, on verandahs and in trading centers. The trade is, however, strongly visible in urban areas where people tend to be more decent and better off financially. The tailor's tools are a sewing machine, scissors, or razor blades, tape, chalk marker, or specific type of pencil or pen. Products included: dresses, trousers, uniforms, shirts, and others. Inputs were textile materials, threads, needles and oil.

In urban centers, most of it was done on verandahs, in temporary shades made specifically for the purpose and inside shops. Artifacts included pieces of cloth. In many cases, tailors work as individuals although one could see them working as a team. In towns, they had licenses. In villages they did not. Most of their customers were schools and individuals. They work for cash, mostly in towns but also in rural areas. Credit as well as paying in kind was commonly found. For example, payment could be a calabashful of beer (a gourd used for the measurement of beer in rural settings of tropical African countries). Work-related problems include poor seating positions, which cause strain to the chest, back, and waist mostly. (see AppendixB: exhibit 127).

Information

Since they sit all day long, tailors' information-seeking habits were limited. Customers were relied on for much of the information. They also sought information from each other and from those who seemed enlightened in their areas of business. Tailors are fairly literate people. Their work requires knowledge of design and arithmetic. In the course of their work, they are bound to create many records such as debtors' records, owners of

clothes records, etc. For this purpose, they keep records. Information use was noted while receiving instructions from customers, information about when a customer would come for the goods and when seeking prices of materials and their types. New fashions attracted a lot of information use because people are interested in appearing in the latest designs. Costs for materials and the prices for stitching created room for more discussions and therefore, information use.

8.4.6 Traditional medicine. Herbalists are the entrepreneurs in this trade. The trade is found both in rural and urban areas. Rural areas and especially forests were sources of the herbs or medicinal plants. Urban areas were basically used for marketing the products. In traditional medicine, the business activities include traditional healing, selling of herbal medicine, investigation of ailments, prescription of medicine etc. In chemotherapeutic laboratories in Kampala, the main activities are the identification of herbal plants, laboratory analysis and taxonomic classification and documentation. Tools for this trade include beads, coins, axes, hoes, knives, mortars and pestles, bottles, plastic containers, and blades. Artifacts are few, if any – that is, remainders of waste herbs. Products of the trade are plants and animals. In plants, the roots, leaves, stems, bark, flowers and wood are used. In animals, skins, spikes, carcasses or skeletons of animals and birds, eggs and shells are used. Hygienic conditions were fairly good all through urban and rural areas, except that where the work was done inside the house, the odour of herbs is sharp and repelling. The location of businesses in towns was along the streets. In rural areas, it was in the homes and inside houses of the practitioners. Within the house, there is a compartment designated for the purpose. This trade is shrouded with a lot of secrets. Those outside it would never know when the herbalist went to look for medicinal plants. Even during preparation, only the chosen individual is allowed to pound, dry and grind the herbs. No one else is allowed. It is for this reason that the art is handed down to generations of relatives in the same home for centuries.

It was difficult to ascertain how many people were employed in each establishment, but at least there was the herbalist and a personal assistant. Therefore, the management style was centralized. It was mostly the adults of advanced age who were engaged in getting

medicines from the forests. Men and women were active in the trade. It must be clearly stated here that herbalists and witch doctors (*sangomas* in South Africa) are different business people, although a herbalist can do both. Most of these people have operating licenses and practicing certificates. The certificate is renewable every year. This issue prompted one of them to ask why medical doctors' practicing certificates were issued once and theirs, yearly. The researcher could give no answer. Practitioners were people dressed ordinarily. Some of them kept records and photographs of important people who visited them especially the business people, the politicians, and army officers. The pricing of medicines was based on the quantities scooped with spoons. The cost was mentioned according to measurements. The terms were cash in towns but in rural areas, some form of credit could also be given. One interesting thing was the psychological fear of debtors not to pay knowing very well that some day again, the same person would require the same services, or that the herbalist may not give the medicine next time. Product marketing strategies were many including signposts announcing the location of the herbalist. Open air displays at selling stalls, and by means of patients making it known that there is a medicine man or woman somewhere, or the fame of the herbalist, charging a little for the first consultation but more for the next visit were other ways. In most cases, the patient voluntarily yields more cash after becoming better. Obviously the relations with peers were good. Observed problems were rain and heat could be problems to sellers along the streets because most of them sold their goods in the open. For those who worked in rooms, a combination of prepared herbs produced a pungent smell that was difficult to tolerate. (Refer to Appendix B:exhibits 5-8, 120).

Information

Information gathering was very interesting. The use of personal knowledge about God as a giver, was found to be prevalent. Customers played a major role in giving the required information. Cell phones were significantly more accessible to them too. Local languages were used mostly. Fear of English was met with sentiments like "*ooh! lusungu!, simanyi lusungu, siwulira lusungu, simanyi Lusungu, manyi lusungu kitono, sa soma*" meaning that, 'I don't know English or I know only little, I don't understand English, I am not educated'. Not all of them are illiterate. Some of course are. Strangely, the illiterate

herbalists who feared to speak English, had written records. How? Within their houses they had school-going children or at least someone who had dropped out of school. These were the persons who are directed to write what was dictated to them. The basic records that were seen included visitors' books that of course were written by visitors themselves, and a book, listing patients. In these books are written names of patients, types of ailment, dates of coming to consult the 'doctor', the fees paid and any balances to be paid. Communication was basically oral and intimately personal. Information use was seen in effecting directives for medicine use, marketing of medicine, seeking patients, history of ailment, instruction of the personal assistant on how to make medicine from the raw material, and re-telling visitors the history of business.

8.4.7 Metal fabrication is an urban trade. The infrastructure depended on the capacity of its owner. But generally activities were carried out in the open air, in permanent rooms, or temporary buildings. The equipment used included welding machines, metal sheers, grinders and welding torches. Tools of trade included hammers, welding sets, saws, metal bars, moulding machines, electric vices, design frames, and electric rods. Often found as artifacts in the social setting were scrap metal, left-over iron pieces, door and window scrap, old chairs, old metallic items. Products included doorframes, windows, baby beds, gates, charcoal stoves, coffee sets, grinding mills, hullers etc. To produce these goods, metal plates, irons, welding rods, angle irons, iron bars, and scrap were required. These came from factories. Hygienic conditions in work places were fair, but in some they were poor. Metal fabrication required being near the road because the products can sometimes be bulky. Most of them operated by the roadside, in-house, or verandah. The management style depended on ownership. It was in most cases centralized. The number of workers varied from two to ten and mostly consisted of male adults and youths. With regard to appearance, workers exhibited ordinary, and professional dress customs, while some appeared to be dirty due to their work. Persons operating businesses included both males and females. Customers were individuals, companies and institutions. The prices of products were negotiable, but according to costs of materials plus built-in profit. In most cases products were pre-priced. The terms of trade were cash, and credit. Product marketing strategies included displays outside

workshop, and taking the products to the market. The observed problems were very crowded work areas, with no shelter, and when it rains, work comes to a halt. Machines were not fully used, and many were idle. Most of them had no protective wear although some had them but found them inconvenient to use, as reported by some of them. Electrical fittings were dangerously exposed. There was also an acute problem of storage space. Work places had very dusty floors. Many workshops had badly-qualified workers to manage sophisticated machines. (Refer to Appendix B: exhibits 45-60; 81-88).

Information

Licenses were kept by some and others did not have any. Records were kept again by some. Information gathering techniques were through consultation with peers, talking to others, the telephone, talking to supervisors, and facsimiles. Information communication channels were interpersonal, verbal, telephone and e-mail. Local languages were widely spoken in work places although English and Kiswahili were also used. Metal workers exchanged information among themselves and with friends. The pattern of boss to worker and vice versa was also noted. Information was used in instances such as in locating materials, discussing designs, completion time for projects, cost of materials, and interpersonal relations.

8.4.8 Food processing is a trade that is carried out in all areas, rural and urban. Activities of this trade are very diverse. They include baking, cooking, milling simsim and ground nuts, grains, coffee processing, boiling milk, brewing and distilling alcohol, roasting maize, cassava, meat and chicken, frying-cassava, fish, *mandazi*, etc. The infrastructure for the business depended on the type of location and nature of specific activity. For example, seasonal roasting of cassava was done in the open air along road junctions or busy roads. Cooking food in an urban setting was carried out under shades and behind buildings where many people worked. Improved ones used permanent buildings. Tools for the trade included *sigiris* (charcoal stove), saucepans, plates and crockery, worktables, mixing machines, power generation, refrigerators, ovens, trolleys, shelves, and scales. Artifacts are maize cobs, ash, over-baked bread, and banana leaves. The activities included baking, cooking, grinding, roasting etc. Products included bread of different

types, food, alcohol, groundnut and simsim (sesame) paste, milk, yogurt, ghee, roasted meat, maize cassava, fried fish and pork. Inputs included flour, sugar, salt, water, oil, eggs, baking powder, *matooke*, firewood, ground nuts, milk, maize fish, cassava etc. Hygienic conditions were found to be good, in some of them, and bad in others. For example, the cooking found in slums is very bad for people not used to such places. Enterprises were mostly located where there were concentrations of people needing the services were found, including at roadsides, backyards, town centers, markets, and within garages. Management styles differed greatly. They followed a pattern of ownership. They could be centralized, decentralized, or consist of individual management. Both males and females did business in food processing although women were in the majority. According to the town bylaws, those who work in town areas are required to have licenses. In rural areas, nothing of the sort was seen and records were not kept. The pricing procedure was such that most products were pre-priced and customers merely mentioned what they needed. In some activities like food roasting, price negotiations were ever part of the deal. Food was paid for directly except in urban areas, where eating on credit was allowed for known and reliable customers. Product marketing strategies were that bread is distributed to outlets and displayed in shops. Signposts were in some cases planted by some trades to announce their products. Cooking within a work shop vicinity was common in towns. Relations with customers are good. Observed problems are crowded eating houses. Hygienic conditions are good for those in the middle of towns and as one moves towards slums, the situation becomes chaotic. In rural areas it was fairly cleaner. There is not much garbage in villages. Other problems are lack of modern machinery for many of the businesses like bakeries and milk collectors. There was a market problem too.

Grain milling is another aspect of food processing that is worth reporting separately. Milling was done for maize, millet, sorghum, cassava, and potatoes. There was also rice hulling. These activities are carried out in all areas, urban and rural. Interestingly, with the development of new technology, milling equipment was found to be smaller and portable. Milling is supposed to be carried out in strong buildings, but this was not the case. It was carried out in temporary shelters. In towns the same pattern is seen. Masindi

District has good examples of this kind of set-up. Tools and equipment for the trade include milling machines, weighing scales, rice hullers, coffee processing machines, and weighing frames. Artifacts were cobs, husks, and flour. The main activities in this trade were sorting, cleaning, weighing, and pricing, milling, packing and selling or storage. Hygienic conditions were much better. Businesses were located in accessible areas such as roadside, peri-urban areas, and dispersed in markets in rural areas. Adults and youth, males and females were found operating mills. Almost all of them had operating licenses although record keeping was done by few. Customers knew charges in advance. Individuals and institutions were the customers. Since most milling machines were stationary, people always went there. But other methods employed by mobile millers were moving into resource areas and doing the work there and then moving away. In some cases the miller as an inducement provided transport for bulk goods. Price incentives were also offered. Problems of this trade were that it was not a very profitable business, especially in places where customers are few. Machine breakdowns were common and buildings where mills were placed in poor areas. (Refer to Appendix B: exhibits 61-73, 125-6, 129, 132).

Information

Information gathering included talking to customers, talking to other millers, meetings, telephone conversations and letters. The communication method was basically oral and interpersonal. Information passed from one to others if services and costs were favorable. Customers were the best source of information to and from mills.

8.4.9 Blacksmith trading is a trade in urban and rural areas. Blacksmiths conducted their work under trees, or in temporary, or semi-permanent structures, and in the open air. Tools of the trade included hammers, files, wheel fans, soldering iron, scissors, and moulds. Artifacts in the social setting include scrap pieces of metal. Activities of the blacksmith include making charcoal stoves, hoes, selling saucepans, soldering and moulding of scales. Their products include metal boxes, charcoal stoves, bicycle supports, carriers, saucepans, knives, watering cans, meter boxes, weighing scales, cutters, slashers, water buckets, metal funnels, sieves. Inputs are scrap, and steel (iron) as

well as products from factories such as angle irons and steel plates. Hygienic conditions were very bad. Enterprises are located by the roadsides or in homes as is the case in rural areas. In either case the work was carried out under a tree, or a temporary shelter. The management style depended on the ownership of the workshop. In rural areas, a workshop belonged to one skilled person. Other people just joined the artisan and did their work and went away, provided they gave something to the owner of the workshop in return. Adults and youths work in this trade, including males at the manufacturing level and females at selling level. Work related appearance was terrible. Entrepreneurs were really dirty due to excess contact with charcoal all time. Customers were mainly individuals and institutions like schools, army barracks, hospitals etc. This was because blacksmiths produced larger and bigger items like saucepans that were not produced by the formal sector. The prices of products were negotiable but the terms of trade were actually cash. Product marketing strategies included display outside workshop or within workspace. Relations with peers were often good because one never knew whether one would also need support from others tomorrow. That is the guiding principle. The observed problems were that workplaces are undeveloped, very dirty and without safety facilities. Most workshops have no running water. Those with workrooms, have leaking roofs. Those without shelters at the workplace have a problem of rain. When rain falls, work comes to a standstill. They also lacked protective wear. (Refer to Appendix B: exhibits 45-60).

Information

In urban areas some record keeping was done but by few. Information gathering included talking to customers, consultation with peers, using personal experience or knowledge. Information searching techniques included visiting other workshops or markets, talking to customers, and through talking, and asking question of those who looked for products. Information communication channels were basically interpersonal. Languages spoken were essentially local.

8.4.10 Fishing and related activities. Fishing is done on lakes and rivers. Boat making went on near fishing sites. Fish mongering was done at the landing sites. Selling was

carried out in markets and at the landing sites. The infrastructure for fishing included developed and undeveloped landing sites, motor boats, canoes etc. In developed landing sites, there were fish handling bays and offices. Tools included boats, floats, lines, fishnets, engines, typoons, oars pressure lamps, stayees or stones, mats and polythene paper. Artifacts were the old boats and the oars. Activities included fishing, landing or docking, weighing, scaling, salting, smoking, fish drying, and selling. Products from fish included fish of different types, air sacs (from the Nile perch), shells, and fish skin (also from Nile perch). Types of inputs were fishing nets, fishing lines, hooks, floats and pressure lamps. Hygienic conditions were very poor. Fisher folks did not have toilets in most landing sites. They said that water usually filled pits soon after they were dug, or they collapsed because the earth was not stable. This called for plastic tanks. Fisher folks drink water from the lake because borehole water is said to be salty at lakesites. Fishermen bathe and release themselves in water. This exposed them directly to water borne diseases such as cholera and bilharzia. Management styles differed greatly. Those who were self-employed did everything themselves. Those in groups practiced a loose decentralized system. Those who employed others operated a centralized system. The number of workers ranged from twenty to four hundred fishers in a landing site. Fishers were mostly males, while employers of fishers could be men or women. Many women actually owned boats. Out of the water, many women were seen active in processing. Most people appeared ordinary, or casual in outlook. Those operating in lakes are forced to have boat licenses and fishing licenses. It was found out that in border lakes, such as Victoria and Albert, fishermen were international citizens. Many came from other countries and stayed in a landing site for many years and as soon as the fish were depleted, they migrated or moved away to other places with their boats.

The observed problems included lack of clean drinking water. There were no schools for children in most of the landing sites and where there were, children spent a lot of time trading fish. Sanitary facilities were few or non-existent in some sites. Water was shared with animals. Some landing sites were not developed. The riparian areas were also prone to floods. There was evidence of serious deforestation of lands surrounding fishing villages. This had caused environmental degradation whose impact this study cannot

enter into to assess. (Refer to Appendix B: exhibits 61-73, 94, 96)

Information

As for record keeping, some kept records and some did not. Information was sought among themselves, by talking to buyers and talking to visitors such as researchers, from the chairmen of fishermen (*Gabungga*), fisheries agents etc. Communication was carried out in many languages. Information was used for many purposes. It was used in negotiating prices, for gathering relevant information about markets and places rich in fish. It is also used for addressing emerging issues on the lake.

8.4.11 The nursery tree business is an urban activity. This business involves opening space on a road reserve along major roads in a town. The seedlings are potted. Customers cannot miss them as they drive along. It is a business aimed at the rich and affluent mostly. Government encourages people to plant trees or forests. The infrastructure includes open spaces or temporary shelters at times. Tools used are hoes, water drums, spades, polythene paper, knives, and basins. Artifacts were disused milk bags, drying seedlings, grown flowers. The activity involved planting of cuttings (potting), watering, selling seedlings, and the tending to nursery trees. The products included seedlings, grafted and from seeds. Inputs included water, soil, potting papers, seeds and tender pieces of trees. Hygienic conditions were good in some places and poor in others. Individuals or family businesses owned most of the nursery beds and therefore, management is centralized. Workers' numbers range from one person to three or four. Persons operating businesses included youths, males, and females. The observed problems included no shelter in case of rain and the fact that people conducted the same business and dealt in the same products. In addition, floods sometimes destroyed gardens during rainy seasons. There was no water during the dry seasons. This caused drying of many seedlings. Sanitary facilities were found to be lacking.

Information

Nursery owners were found to be educated somehow. They kept licenses and other records because urban authorities were near them. Major customers included individuals,

although institutions also bought for their forestation programs. Like any other business, relations with peers were good. Information gathering techniques basically included word of mouth and consulting with customers. Both local languages and English were predominantly spoken. Information usage was found in marketing, and solving problems within the work place.

8.4.12 Brick making is a peri-urban and rural industry. Brick making depended on availability of land, water and easy access for transportation of products. No infrastructure is required initially. But as the activity begins, temporary shades, were mostly needed because the activity was done in the open air. Tools required are hoes, moulds, water cans, spades and water drums. Artifacts are the broken bricks. The making of bricks includes digging clay, mixing, fermenting of clay, moulding, drying, packing and firing of bricks. Obviously the products included bricks, that is, building bricks, facing bricks, hollow bricks and vents. Inputs were water, clay, firewood, and grass. Hygienic conditions are always bad. Working sites are found at roadsides, swampy areas, and in the open air. The management style depended on the ownership. The number of workers depended on the intensity of need for bricks but certainly making bricks required many people for it to be efficient. Adults and children, men and women, were active in brick making. Brick makers are always muddy. Licenses are difficult to see in the bush. To some extent records were maintained by some while the majority did not. The price of bricks throughout Uganda was found to be almost similar. It was not clear how this came about. Owners sold for cash strictly. Bricks were pre-priced. Product marketing strategies were of three types. Customers travel to brick sites and make their own selection. Owners carry samples on a bicycle and take them around building sites and display on site. The relation with peers was found to be good. The observed problems included: lack of toilets, poor roads, no rest places, absence of running water, and the environmental problems had led to the creation of ditches where mosquitoes bred. Sites are located in the bush, where hygienic conditions are very poor. (Refer to Appendix B: exhibits 34-44).

Information

Information gathering techniques included talking with customers, asking friends, and telephone conversations. Entrepreneurs used local languages, Swahili and English in their workplaces. Information was used in marketing mainly.

8.4.13 Construction trades include building, stone crushing, plastering, glass fitting, plumbing and painting. Plumbers and painters are itinerant workers in urban areas. Apart from stone crushing, all others are professional trades requiring some level of training. They are mostly found in urban areas where construction trades are mostly concentrated. Accidents are common in the building sector. Falling hammers, nails piercing legs, glass cut injuries, and other occupational hazards are problems observed in these trades. (Refer to Appendix B: un numbered exhibit at the left of exh. 40).

Stone breaking is an activity found in places with rocks. It is a specific activity. No formal training is required apart from energy. It is a very difficult job with many risks, and accidents are an everyday occurrence. Activities include digging out rocks, burning to crack the rock, crushing the boulders into different sizes, collecting, grading and selling. Artifacts are pieces of unsold stones. Tools of the trade included hoes, hammers, spades and basins. Stone crushers face a lot of problems, including heat from the sun and also from the fire that is used for cracking rock, which is unhealthy for the stone breakers. When it rains, they stop work. Falling rocks cause many hazards. When breaking stones, rock pieces often injure workers. Tools used are mainly 5-15 kg hammers, which sometimes give away and cause severe injury to the person working. Sometimes parts of the tools split upon impact with rock and shrapnel may injure workers.

The observed problems were accidents and lack of safety equipment and apparel. Males and females are engaged in stone crushing. (Refer to Appendix B: exhibits 40, 110-113).

Information

Builders sought information from building sites, from colleagues or prospective developers. There is evidence of few artifacts, apart from bits of wood. Information was

needed to spot jobs and markets. Information seeking was carried out through snowballing. Information was mainly found at social gatherings.

With reference to stone crushers, information is usually gathered from colleagues and transporters, but also from developers themselves. Information most required included to know who was building where. They also sought information on prices from others, and from their colleagues.

8.4.14 Technical Services. Included here are refrigeration services, photography, watch repairing, electronic appliances (radios, TV, cell phones, electric irons, computers, cameras, video recorders) repairs. These are mostly urban jobs requiring a high level of education. Most of these trades are operated in small rented rooms along the main roads. (Refer to Appendix B: exhibit 133, 135). Customers usually bring goods to be repaired to the workshops of technicians working in this field. Articles brought in for repairs often include TV sets, radios and electric irons. Relations between the technicians and customers are mostly cordial.

Information

Information seeking was based on mutual relationships, that is, customers giving information to the technician and vice versa. Each side feeds the other with information. Information was used when searching for spares, prices of the spares and charges for completed work. Information seeking patterns were mainly observed while the parties involved used their cell phones, or talked to peers and fellow-customers. Networking was an important aspect of information access.

8.4.15 Stamp making, shoemaking and shining, as well as photo framing are all trades whose activities are carried out under shades, especially verandahs. These trades are located in commercial areas of towns, usually in a tidy environment. There are almost no artifacts. Everything is used and whatever remains is swept away or kept as spares. Negotiation is a method of pricing products. Refer to Appendix B: exhibits 15-17, 128, 134).

Information

Information is accessed from customers and peers. Entering into friendships was one way to access information. Local languages and English were used. Interpersonal relations were a better way of accessing information. Consultation with peers and customers was a way of accessing information as well.

8.4.16 Boda Boda and other forms of transport. This is a transport service carried out by using small motor cycles and bicycles. No artifacts are left. Problems faced by these people have largely to do with the low volume of work. Most of them are illiterate. Riding a bicycle every day is a hard job. Accidents such as collisions or being knocked down by vehicles are many. (see Appendix B: exhibits 94-101).

Information

Information was gathered from travelers and from among the operators themselves. Operators tend to concentrate on places where major transport services end, and while they wait for customers they chat among themselves. This is how information is shared. Because they ride in different directions, they talk to passengers wherever they go. In this way they get information as fast as possible. This information is shared with colleagues as soon as practicable. Information required by *boda boda* operators is about distances and the locations of places. They make a casual calculation of costs to charge or consult fellow friends when necessary. Experience is relied on to a great extent among these people.

8.4.17 Charcoal burning. As a trade it is definitely visible and is among those most destructive to the environment. It is a rural activity, although it is urban people who buy the charcoal. Most parts of the country are becoming barren because of this activity. Charcoal burners leave waste such as heaps of soil littered with small charcoal bits and incompletely burnt firewood, where they have burned charcoal. Problems observed among these people include the dirty conditions in which they work (as in the blacksmith trade), and the fact that the amount of energy expended in making charcoal is greater than

its worth. Enforcement officers often arrest them with charcoal, which is of course not returned. They suffer a great deal. (Refer to Appendix B: exhibit 91-93).

Information

Information is gathered from friends and from buyers of charcoal. This is mostly about the price, and where the market is. Apart from information about marketing, they would want to know whether enforcement agents are to be found on the roads.

8.4.18 Vending and hawking. These are forms of trade. Vending is done at fixed locations, while hawking is a mobile business. Both merchants sell assorted merchandise, old and new. They do not have artifacts. They face hardships of harassment from urban authorities. Because they are many, shop owners hate them because their prices are lower due to the fact that they do not pay rent, only registration and license fees.

Problems seen among these groups were that the merchandise could be stolen goods from big shops or containers or even libraries, in the case of book vendors. Walking all day is not an easy task as they become tired and worn out. Those in stationary positions are actually idle most of the time, while those who sell foodstuffs eat them slowly as a pastime. The harsh sun, or rain is also a big problem to them. When it rains they have to relocate and come back when the ground is dry – and this could take a day. (see Appendix B: exhibit 101, 122-124).

Information

Most of the entrepreneurs in this category of trade are ‘double dealers.’ They work for themselves and also work as informers for the government intelligence services. Those who are not, nevertheless rely on social networks of their own to gather and share information.

8.4.19 Other informal activities. These include marketing of agricultural produce shown in exhibits 114-121, 130-131; hair dressing in exhibits 89-90; water harvesting in exhibits

106-09; and child labour in exhibit 113.

8.4.20 Observations arising from this section

The informal sector is heterogeneous. Both male and females are engaged in the business. Men, women, youth and children are also engaged in it. Most trades are located on roadsides or where there are many customers or resources. Each trade has unique opportunities as well as misfortunes. Most trades have poor facilities. Specific trades have specific activities. The number of people employed is small in most of the enterprises, considering that they do not work in groups. Licenses are kept by some and some are not licensed. Relations with peers are good throughout their trade. The pricing of products varies. Cash and credit sales are common.

Recurrent information patterns

Information seeking techniques

Information is obtained by using personal experience, listening, asking, consulting, visiting, phoning, conversing, observing, reading, and by performing and participating in activities.

Information gathering

Information gathering follows a particular pattern. Personal experience is used first, and when this is found inadequate, the next step is taken, namely consultation or talking directly with immediate workmates. It may happen that answers to issues are found at that stage. Here information gathering ends. Instead, absorbing and adding to existing personal knowledge, reprocessing or repackaging and intra decisions take precedence, whether the information is used or not. If the information is found to be adequate and usable in the demanding situation, it is recalled from memory as new information, that is, in a repackaged form, and used. If not, and if the need for information still exists, then exploration opens up boundaries beyond the work place. This is usually the case in an active search for information. From this point onwards, distance factors and time factors emerge, and feelings of a possibility of acting without information take shape. As a result frustration sets in.

Let us imagine for the sake of developing the argument that the information seeker knew that the consequences of acting without information were serious, then he/she would continue to seek information. The search broadens and goes afield. Information gathering at this stage is conditioned by certain factors such as the existence of information sources and the costs of getting information, or there may be a lucky break, in that someone may come with the necessary information. In the former case the information seeker would look for information in known sources. One may be lucky and come across information accidentally, serendipitously. Accidental information gathering is a passive activity. In the second possibility, the information seeker would weigh the benefits against the value of having the required information. Fortunately, there are possibilities available in the environment that may lead to the solving of information problems. There are specific people whose jobs are to keep people informed. And there other mechanisms, such as observing actions taking place in similar establishments, inquiring, or receiving information directly, visiting places and people who may know, phoning around social networks, attending meetings, and reading information materials that may be available. These are the common procedural methods of information gathering.

Communication patterns

Depending on the nature of information, seeking or gathering of information has defined routes. It has been observed that horizontal, vertical, cross sectional and diffused patterns are applied. For example an employee would use vertical communication patterns when seeking information from his employer. Likewise the same person would use horizontal or diagonal communication patterns with his equals. Self-employed persons have no order. Such persons look for information in any order and means available to them. In that context a diffused system or pattern would appear mostly to be in use.

Information sources

Besides information within the minds of entrepreneurs, the information required by them is obtained from other people. The use of personal knowledge is found to be most common. Peers or colleagues, customers, and friends form these sources.

Information channels

Channels relate to the five senses of human beings. Information is obtained mainly through word of mouth by talking directly, by use of social networks, and telephones. Letter writing is used by some of those able to write. Extracting information by observation is the other channel.

Languages

Local languages featured prominently, followed by English and Kiswahili. Foreign languages like Lingala and Arabic were in use to some extent.

Information use

Information is mainly used in looking for or spotting contracts, in record keeping; seeking sources of inputs or supplies; looking for and during marketing, and during price negotiation. During the process of making goods, information is used for *problem solving* such as *designing products, seeking advice, getting clarifications from those who know more, seeking help, seeking instructions, confirmation of doubt* etc.

8.5 Summary

In concluding this chapter, an information activity matrix provides the perspective of the information behaviour. Included in the matrix are findings from three instruments. A tally of them all is provided on the right hand side of the table. The criterion to enter the tally is that something must appear at least in all columns or in two of them. It is explained here that empty spaces had no questions asked about them in particular instruments because they were not relevant.

Table 1X: Information activity matrix for organizations, informants, and observation.

Information Activity	Organizations	Informants	Observations	Tally
Information needs	training, capital, marketing, sources of credit, areas of investment, inputs, advisory centres, lobbying & advocacy, pricing techniques, quality improvement, equipment.	Markets and marketing strategies, credit sources, access to tools, prices and pricing techniques, skills development, production quality.	markets, raw materials/ supplies, credit, tools, training, advocacy and lobbying, quality improvement, new areas of investment	training, markets, raw materials/supplies, tools, quality improvement, capital, advocacy and lobbying, new areas of investment
Information-seeking	Seminars, meetings,	Consultations, asking, listening, meetings, conversing	consultations, asking, listening, participating in activity, reading, observing, visiting conversing, phoning etc	Consultations, meetings, asking, listening, conversing, asking,
Information sources	libraries, Government depts, NGOs, partners, internally generated information, abroad, personal experience, research institutions, training sessions.	Government departments, NGOs, places of worship, local councils, consultations customers, personal experience and knowledge, newspapers, training sessions.	personal experience, peers, customers, friends	Experience, Government, NGOs, training sessions, customers, personal experience,
Information	word of mouth,	word of mouth,	word of mouth,	word of mouth,

delivery channels	letters, publications, cell phones, addressing in meetings, w/shops, radio, demonstrations.	public libraries, places of worship, government officials, newspapers, radio, meetings, w/shops.	social networks, telephones, letter writing, observation.	workshops, radio, meetings, letters
Languages	local, English	local, English, Kiswahili, other foreign languages	local languages, English, Kiswahili, Arabic, Lingala, Luo	Local, English, Kiswahili
Information use			seeking supplies, spotting markets, price negotiations, getting clarifications, seeking advice, seeking instructions, confirmation of doubt.	seeking supplies, spotting markets, price negotiations, getting clarifications, receiving advice, instructions etc. confirming doubt
Constraints	lack of suitable books, language barriers, illiteracy, information materials expensive, low priority to information, mobilising entrepreneurs difficult, accessing international information expensive. low or no budgets for information, limited capacity,	low absorption of information by entrepreneurs, apathy, illiteracy, poverty, no central place for information, wrong language of infor. Delivery, few trained information workers, wrong timing of inform. , underdeveloped information infrastructure, inferiority		Illiteracy, limited information capacity in the country, attitudinal problems.

	negative attitude of some entrepreneurs	complex, tax defaults, distances, negative attitudes.		
Suggestions	radio, and mass communication, ICT field trips, networking, capacity building, collaboration, promoting library services, repackaging information, education	adult literacy, seminars, more newspapers in local languages, repackaging, radio, training in information literacy, increasing transmission modes, regular meetings, research in info. needs.		Radio, repackaging, mass communication in local languages