

## CHAPTER 1

### INTRODUCTION

#### **General introduction and statement of problem**

Information poverty is one of the main forms of poverty today. It relates to an individual's or communities inability, not only to access essential information but also to benefit from it in order to meet their basic needs for survival and development.

Information poverty, as I will explain in this thesis, is a rather complex notion and many factors contribute to this condition. One of the primary contributing factors is the shift from the industrial era to the information era which is characterised by a new information based economic model (Moore, 1998). This paradigm shift is made possible by the development of modern information and communication technologies (ICT). Modern ICTs brought about profound transformation in the information and knowledge landscape. These technologies are indeed the most spectacular and revolutionary technologies ever developed when it comes to the creation, distribution, dissemination and repackaging of information, and the interactive sharing of knowledge. What has changed is not the fact *that* people create, manipulate and use knowledge - this has always been the case. However, a fundamental change has taken place in the *way* in which knowledge is created, manipulated and used.

This paradigm shift towards the economics of information introduced advanced capitalism as well as the process of globalisation. Through globalisation a network of economic and social networks is created and the gap between rich and poor countries is no longer a “physical object gap”, but has become rather an “immaterial information gap” (Clark, 2001). Open markets and competitiveness have made it imperative to invest in innovation and knowledge production. Research and development (R & D) as well as higher education increasingly play a crucial role in knowledge production and innovation to meet these new demands (Friedman, 2005). This has led to greater investment in knowledge production.

The problem is, however, that information and knowledge societies emerged at the expense of the so-called information and knowledge poor countries. Scholars such as Rifkin (1995), Haywood (1995) and Chatman (1996) started in the nineties to distinguish between information rich and information poor countries. ICT statistics support their claim. For example:

- One third of the world's population is illiterate.
- More than 2 billion people live under \$2 a day.
- In the USA there are more computers than in the rest of the world (combined).
- The ten richest nations in the world are responsible for 84% of total expenditures on R & D.
- 20% of the world's population is responsible for 90% of Internet usage (World Bank Report, 1999/2000 & Human Development Report, 1998/99).

What needs to be stressed here is that, although ICT played a dominant role in dividing the world between information haves and information have-nots, and the role of ICT should therefore not be underestimated, information poverty is not restricted or limited to a technology/digital divide only. The information divide is not limited to the 'technology insiders' and "technology outsiders" of cyberspace (Floridi, 2001). It is a much more complex phenomenon including issues such as cultural and language diversity, levels of education and the ability/inability to access and benefit from information as well as the ability/inability to participate in a meaningful way in the new information based economy. Furthermore, the divide between the information rich and the information poor is not only a divide between societies and countries. It occurs also between individuals who might share the same culture and physical space.

Information poverty is furthermore not only of a political, cultural and socio-economic nature. We live in a new emerging global information society where we are, more than ever before, dependent on creation of, access to, sharing and manipulation of information. This has created new power relationships and also raised questions and concerns such as the fundamental freedom of people, the right to freedom of expression and communication, the right of access to information and the fair distribution of information in the market place. This emerging global information society and the growing

divide between the “information have” and “information have nots” is therefore also a serious moral concern.

Because information poverty affects the lives of billions of people on a daily basis it should be on the world’s moral agenda of social responsibility. It is a moral imperative that the continuous construction of the growing information society be regulated by a set of universal principles based on social justice. This statement serves as my basic motivation for writing this thesis: *viz.* to reflect, from a moral, and more specifically a social justice perspective, on the problem of information poverty and to formulate broad ethical principles that can be used to guide the social, economic and political initiatives to solve information poverty and to create a fair and equitable information society.

The central statement of the problem can be formulated as follows:

- to investigate, from a moral perspective, the notion of information poverty in terms of its definition and causes;
- to investigate the relationship between information poverty and social justice and
- to identify suitable moral guidelines that can be used to address the moral concerns associated with information poverty.

I unpack this problem by asking and addressing the following sub-problems:

- What is poverty and why is it a matter of moral concern?
- What is information and what is the relationship between information and poverty? A clear understanding of this relationship is necessary for the understanding and definition of information poverty.
- What is information poverty and what are the main reasons contributing to this condition? An understanding of the reasons that lead to information poverty will shed light on the moral concerns associated with information poverty.
- Why is information poverty a serious moral concern and how can social justice be used as a moral tool to guide the decision-making processes in finding solutions to information poverty? Understanding of social justice will help to formulate moral guidelines to address many of the problems associated with information poverty.

- What are the moral guidelines, based on social justice, that are appropriate to address the different moral concerns associated with information poverty? This question can be seen as the practical application of the theoretical reasoning regarding information poverty.

## **1.2 Research methodology**

The best approach in my opinion to address information poverty is from interdisciplinary work. I therefore use sociological explanations in my discussion on poverty and rely on both social and information sciences to understand and define information poverty. I make use of recent philosophical theories of justice to understand and explain the moral challenges associated with information poverty. I used the grounded theory as a research method to systematically gather and analyze the data.

It is clear that a quantitative approach alone cannot be used to address the problems that I raise in this thesis. The research is therefore primarily qualitative in nature and the techniques I used for collecting empirical data is mainly focused on secondary sources. I consulted amongst other bibliographic databases, citation indexes, journal articles, text books and of course the Internet to gather my information.

I used quantitative methods to determine and evaluate some important statistically information, for example, the number of Internet users in a particular country.

The mode of analysis is mainly of a hermeneutical nature focusing on the understanding of text within a particular social and cultural setting of people.

Scientific knowledge is supposed to be reliable knowledge. The question then arises: What makes the knowledge created in this thesis reliable? There are three possible qualitative approaches. These are the positive qualitative approach, the interpretative research approach as well as the critical inter-subjectivity approach (Olivier, 2004; Myers, 1997; Mouton, 2000). The positive quality approach assumes that there is an objective reality that can be known. The interpretative research approach assumes that there is no objective truth or reality and that it cannot be known. Truth and reality can only be known through social constructions such as language, consciousness and shared meanings. The philosophical base of interpretive research is predominantly phenomenological in nature. The critical inter-subjectivity

approach offers an alternative to the first two approaches. The main objective of critical inter-subjectivity research is seen as being one of social critique. I used this approach because the inter-subjective role of the researcher is clearly outlined. This approach allows the researcher to analyze and interpret data within the framework that reality is socially constructed. This allows for moral reasoning and reflection on the problem of information poverty.

### **1.3 Current research**

Although the use of the concept of information poverty dates from the early nineteen fifties (Lievrouw & Farb, 2003) it was only recently (since the nineteen nineties) that there has been a real interdisciplinary research interest in the notion of information poverty. The best known study representing this era is arguably the work of Haywood, *Info-Rich - Info-Poor: Access and Exchange in the Global Information Society* which was published in 1995. His book deals mainly with information technology and access to information and the moral issues associated with information poverty are not addressed.

Based on a literature survey I will highlight contributions to this field of study. The list is not exhaustive but covers some of the main contributions.

- Cronin (1992:32) defines information poor as “[n]ot knowing what options exist, being an information “have-not”, [who] threatens to create a class of electronically colonised infopoor techno-peasants”. Information poverty is therefore defined as not knowing what options are available.
- According to Buckley (1987:43) information poverty implies the absence of computers and access to communication: “People without computers and access to communication lines will be the information poor in the future unless other avenues for access are provided by libraries”.
- Chatman (1996) emphasises the fact that information poverty is a “complex social and cultural phenomenon” and cannot be seen as equal to economic poverty. “I was influenced by a debate in which information poverty and economic poverty were interchangeable conditions of need. After systematically examining this relationship, however, I cannot support this argument” (Chatman, 1996:194).
- Information poverty is also understood and defined in direct relation to the human being and his/her attitude towards information. Akhtar & Melesse (1994:314), for example, see the problem of information poverty

as an extremely complex one that encompasses factors such as attitudes, managerial skills and finances: “The general lack of appreciation of the role of information, the almost non-existent national information policies and the recurrent, inadequate financial resources allocated to information systems and networks development and maintenance have severely deterred the use of information to solve Africa’s socio-economic problems”. In support of this definition, Tapscott (1995:294) enhances the importance of education which must, according to him, be seen as central to address the problem of information poverty. According to Ponelis (1998), the information poor can be defined as those who lack information (literacy) skills such as the ability to locate data leading to information, choose from amongst a variety of sources, analyse and interpret what has been gathered for relevancy and accuracy as well as the ability to discriminate between sources of information.

- Information poverty is further described as a geographical phenomenon embodied internationally (e.g. so-called information rich and information poor countries) as well as nationally in terms of geographic areas (e.g., rural vs urban areas) (Chatman 1996; Braman, 1998).
- The terms information poverty and richness are also associated with information technology and the inaccessibility thereof (Doctor, 1991; Robins & Webster, 1999; Haywood, 1995).
- As is partly illustrated above, information poverty is also seen in relation to access to information. In 1986, the Congress of Librarians in the USA dedicated an entire conference to the causal relation between information poverty and access to information. According to Aguolu (1997) access to information (which is seen as a prerequisite to becoming part of the information society) will remain a myth for developing countries until they overcome prevailing obstacles such as a high rate of illiteracy, unawareness of the relevance of information and a lack of infrastructural facilities.
- There are also some indirect references in which the term “information poverty” is not explicitly used, but reference is for instance made to “the gap”. Steele-Vivas refers to a gap between those who have access to information and the masses of dispossessed and alienated populations (1996:160). For Broadbent (1992:194), the gap is a knowledge gap which he believes is growing at an exponential rate between the North and the South. He perceives this growing gap to have introduced a dependency relationship with regards to access and use of information.

- Manuel Castells wrote extensively on the information society, including the so-called information gap. He uses the concept “informational city” to explain this gap. He discusses how the concept can be used to analyse the changes of class structures in cities due to the flow of information and ICT, as well as to assess cultural developments due to these changes. This flow of information, which is a central feature of his notion of the information society, created a class structure between those who control the flow of information and the so-called “underclass”. This creates social disparities between those who control information and the poor who do not occupy information related occupations (1989, 1994, 1998). This distinction made by Castells led the well known sociologist Frank Webster (1995:209) to conclude that “...we may legitimately talk here of the information rich and the information poor in the world city”.
- Herbert Schiller, the well known Critical Theorist, approaches the notion of information poverty from a socio-economic perspective. According to him the political economy of the production and distribution of information is based on advanced capitalism. This has not only led to the commoditisation of information, but also to the creation of a class structure comprising of those who can pay for and own information versus those who cannot. Based on his Marxist interpretation of society he argues that this “information gap” will lead to an “information revolution” (1983, 1984).
- For Floridi (2001) the divide between the information rich and the information poor is not limited to the “technology insiders” and “technology outsiders” of cyberspace. He argues that this divide also relates to culture, language and context and is therefore a complex phenomenon.
- Lievrouw and Farb (2003), in their research on information poverty, focus on so-called “information inequities” and make a distinction between a vertical or hierarchical perspective and a horizontal or heterarchical perspective. According to this view the vertical perspective represents an approach where access and use of information is seen as a function of individual and group demographics and information inequality is determined by the socio-economic status of people. According to the horizontal perspective, individuals and groups with similar economic and social traits may have different information needs as well as different experiences regarding access, use and needs of information. This can also create information inequities.

- In the field of information science very little research has been done on information poverty and social justice. In most cases, information poverty is approached from an information literacy perspective where the focus is on the ability to identify information needs and to find and benefit from relevant information (Sweetland, 1993).

#### **1.4 Limitations of current research and value of this study**

Based on an overview of the current literature, as summarised in the previous paragraphs, it is evident that what is missing is a thorough and in-depth analysis of information poverty. Research has also been limited in the understanding of the multi-dimensional causes of information poverty as well as its complex nature. Neither has the real impact of information poverty on the lives of individuals and societies been measured or determined.

Very little research has been done on the moral concerns raised by this form of poverty. Most publications that address the moral issues focus on specific concerns such as access to information or the freedom of expression. There is a lack of research that focuses specifically on social justice and information poverty taking into account its complexity and its multi dimensional causes.

#### **1.5 The purpose and contribution of this study**

The purpose and contribution of this study is directly linked to the current limitations and shortcomings of the current research on the relationship between information poverty and social justice.

As I have indicated, my main motivation behind writing this thesis is my concern that this kind of poverty affects the lives of billions of people on a daily basis. As such, it should be on the world's moral agenda of social responsibility. It is indeed a moral imperative that we construct the new emerging information and knowledge society on sound and fair moral principles.

For information poverty to be an item on the world's moral agenda requires that we have a very clear understanding of what information poverty is. In our philosophical traditions, spanning thousands of years, we have deliberated extensively on social justice and the notion of poverty, but we



have done very little to fully understand this form of poverty and its moral concerns.

The main aim of my study is twofold. Firstly to do an in-depth study of the question: ‘What is information poverty?’ I will attempt to formulate a standardised description of information poverty and also to develop a clearer understanding of the dynamics of the field. These include an understanding of its complexities and the variety of reasons contributing to such a condition. The second aim builds on the first one, namely to thoroughly understand the moral concerns and challenges associated with this form of poverty. In addressing these issues I will propose a moral framework, based on social justice, which those involved in policy formulations and practical applications of policies regarding information poverty can use as a guide.

This study is therefore a modest but important attempt, not only to make a valuable contribution to the growing field of information poverty but also to ensure that information poverty is not only another discussion item on the world’s moral agenda for social justice but an action item that implies application and implementation that can change the lives of people.

## **1.6 Chapter division**

To respond to the central statement of the problem, I organized the chapters in this thesis according to the stated sub-problems. I structured the chapters in the following sequence:

### *Chapter one*

In this chapter I discuss the background of this study and formulate the central statement of the problem and associated sub-problems. I describe the research methodology used as well as the limitations and short falls of current research on information poverty and social justice. Following from this, I explain the contribution of this study to the field of information poverty and define the purpose of the study. The terminology and acronyms used in the thesis are also addressed in this chapter.

### *Chapter two*

In this chapter I explain the notion of poverty concentrating on its complexity and its multi-dimensional aspects. I also elaborate on the question why poverty is a matter of moral concern.

### *Chapter three*

This chapter focuses on information as a concept. I standardise the use of terminology and differentiate between data, information and knowledge. Based on my own description of information I identify different characteristics of information. I also illustrate, based on the identified characteristics, the relationship between information and poverty.

### *Chapter four*

In this chapter I expand on the content of chapters 2 and 3 to answer the sub-problem: “What is information poverty”? Based on the notion of an ideal information rich society, I define information poverty. I focus specifically on the factors contribution to information poverty and illustrate its complex and multidimensional nature.

### *Chapter 5*

In this chapter I attempt to answer the question why information poverty is a serious moral problem. In using the arguments discussed in Chapter 4, I illustrate the main moral concerns associated with information poverty and illustrate why it should be addressed. I then argue that social justice and human rights can function as two universal acceptable norms that can be used as moral tools to address these moral concerns. An in-depth discussion on both moral concepts follows, and I illustrate how both social justice and human rights can be applied to the moral concerns that I have raised.

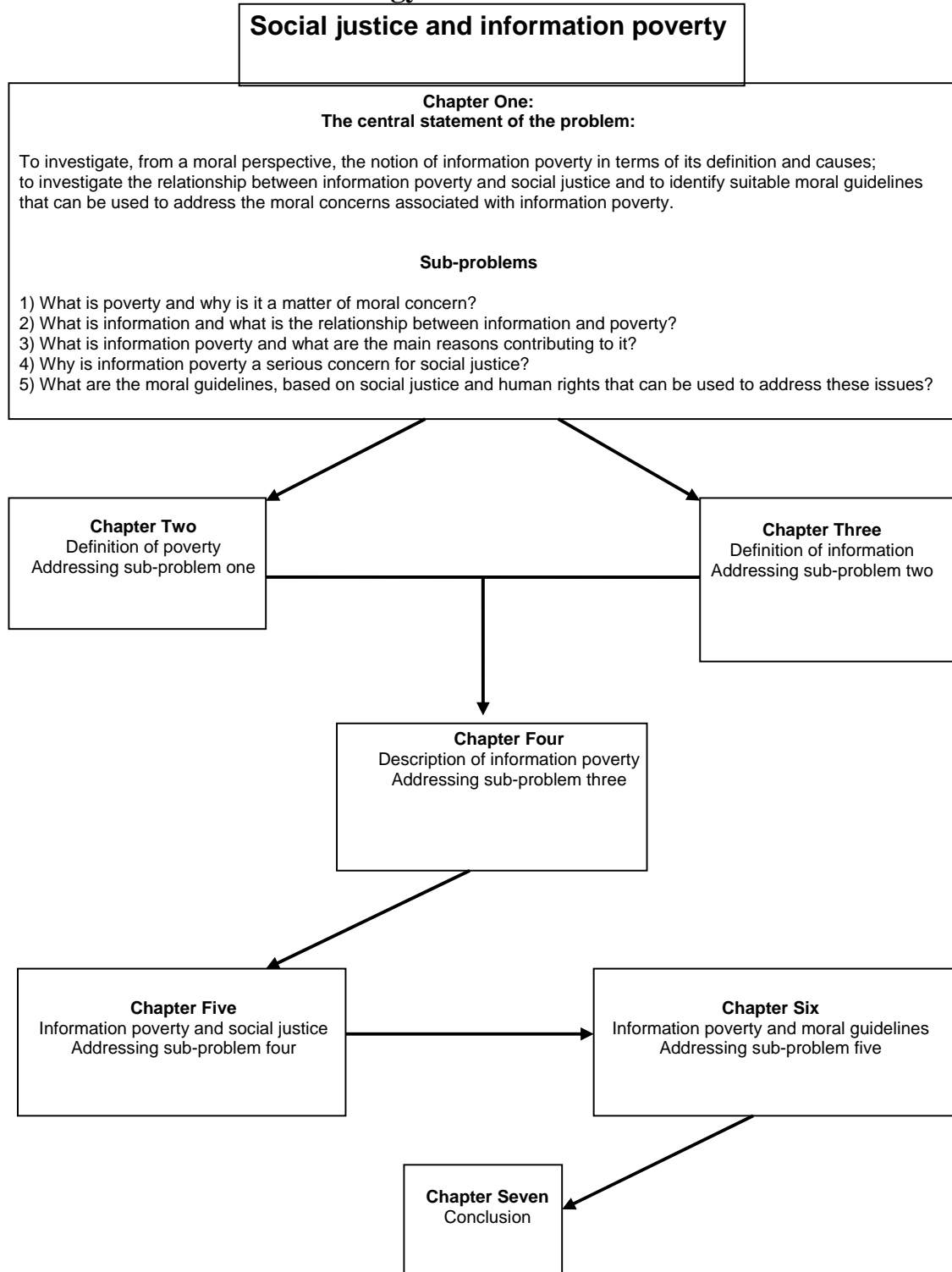
### *Chapter 6*

Chapter 6 focuses on the practical application of both social justice and human rights to address the moral challenges facing information poverty. I distinguish 8 different moral guidelines and illustrate, by means of practical examples how social justice and human rights can be applied to successfully address the moral challenges posed by information poverty.

### *Chapter 7*

In this chapter I round off my thesis and summarise my main findings.

## 1.7 Definitions and terminology



**Figure 1: Outline of thesis**

## 1.8 Clarification of concepts

### *Ethics*

Ethics is a branch of philosophy that deals with human conduct and character. As an academic discipline it is divided into descriptive, normative and meta-ethics. Descriptive ethics focuses on the description of the ethical behaviour of people without any normative prescriptions. Meta-ethics focuses on issues such as the origin of ethics, and definitions of moral concepts such as “good”. Prescriptive ethics investigates ethical problems from a normative perspective. The main aim of normative ethics is making value judgements and formulating ethical guidelines for individuals, professions, and society (Johnson, 2000). This study on information poverty is done from a normative perspective and suggested guidelines are formulated to address moral concerns related to information poverty.

### *Ethical relativism*

Ethical relativism takes as its claim that ethical reasoning is relative and determined by people, cultures, time and contexts. There is a negative claim and a positive claim. The negative claim emphasises the relativity of moral reasoning – for example, it denies universal norms. Ethical relativism also claims some certainties – in other words it makes some positive claims of which the most famous is that what is “right and wrong is relative” (Johnson, 2000:30).

### *Information and communication technologies*

Preston (2003:35) defines modern ICT as “the cluster or interrelated systems of technological innovations in the fields of microelectronics, computing, electronic communications including broadcasting and the Internet”.

### *Information and knowledge societies*

An information and knowledge society can be defined as a society that operates within the paradigm of the economics of information. It values human capital as the prime input to production and innovation. An information and knowledge society is well connected via modern ICTs to the dematerialised economy, and has access to relevant and usable information. A highly sophisticated physical infrastructure underpins this economic model and allows the delivery of the material objects that are accessed and manipulated in the dematerialized world of modern ICTs (Britz, *et al.*, 2006: 28).

## Abbreviations

ICT	Information and communication technology
R & D	Research and development
NEPAD	New Plan for Africa's Development
ACC	Administrative Committee on Coordination
ACC	the Administrative Committee on Coordination
AEJP	African eJournals Project
AGORA	Global Online Research in Agriculture
AISI	African Information Society Initiative
AJOL	African Journals Online project
ALA	American Library Association
ALMA	African Language Material Archive
ANC	African National Congress
AU	African Union
CAMP	Co-operative Africana Microfilm Project
CAORC	Council of American Overseas Research Centers
DMCA	Digital Copyright Millennium Act
DRM	Digital Right Management
ECA	Economic Commission for Africa
EU	European Union
GDP	Gross Domestic Product
HINARI	Health InterNetwork Access to Research Initiative
ICT	information and communication technologies
IFLA	International Federation of Library Associations and Institutions
IIPA	International Intellectual Property Alliance
INASP	International Network for the Availability of Scientific Publications
IOM	International Organisation for Migration
IPC	International Patent Classification
IPR	Intellectual property rights
ISP	Internet service provider
ITU	International Telecommunication Union
NEPAD	New Plan for Africa's Development
NICI	National Information and Communication Infrastructures
OECD	The Organisation for Economic Co-operation and Development
PERI	Programme for the Enhancement of Research Information

R & D	Research and development
RSF	Reporters without borders
SADC	The Southern African Development Community
SANSA	South African Network of Skills Abroad
SCOLMA	Standing Committee on Library Materials on Africa
SECI	Socialisation, Externalisation, Combination, Internalisation
TKDL	Traditional Knowledge Digital Library
TOTKEN	Transfer of Knowledge through Expatriate Networks
TRIPS	Trade Related Aspects of Intellectual Property Rights
UDHR	Universal Declaration of Human Rights
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Program
UNESCO	United Nations' Educational, Scientific and Cultural Organization
WARA	West African Research Association
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WSIS	World Summit on the Information Society
WTO	World Trade Organization

## **CHAPTER 2**

### **DEFINITION OF POVERTY**

#### **2.1 General introduction and objective of chapter**

For a meaningful analysis of the problem of information poverty from a socio-ethical perspective, one should firstly examine the concept of poverty and its moral impact on society. This then, in a nutshell, describes the objective of Chapter 2.

I have arranged the chapter as follows. The first section focuses on the meaning of poverty. In addition to dictionary definitions, I examined popular language usage to describe poverty. The relationship between poverty and wealth is then analysed. Next, I described the various forms and levels in which poverty is manifested. The various causes of poverty are addressed, together with ways in which poverty can be measured. Following this, I examined the effects of poverty on society. Finally, I considered the relationship between morality and poverty. These discussions allow for examining the relationship between social justice and information poverty, which I will discuss in subsequent chapters. In conclusion, I outlined a number of observations.

#### **2.2 The meaning of poverty**

What is the meaning of the terms “poverty” and “poor”? Generally speaking, these terms are used in different ways and contexts. They are primarily used to indicate the economic and social status of people. People who earn a low income are poor and live in poor areas. When one says: “That poor person”, poverty has the added connotation of pity, inferiority and subservience. For this reason, according to Adcock (1997:208), less affluent people dislike being referred to as “poor”.

Poverty is furthermore the direct opposite of wealth. Wealth is generally linked to concepts such as abundance, status and high quality.

### **2.2.1 Standard definition and etymological roots**

Etymologically the term poverty comes from the Latin *pauper/paupertas*. In English poverty has been in use since the 12th century and is directly derived from the French word *poverté*. It has a number of meanings, among others: not rich; subservient; inferior; to be looked down on; cheap; to lose possessions (*Oxford Latin Dictionary*, 1976:1350; *Webster's Dictionary*, 2000).

In some dictionaries poverty is described as follows: “The state of one with insufficient resources” (Webster Online, 2002). “The lacking of material possessions; having little or no means to support oneself; needy, lack of means of subsistence” (*Webster's New Twentieth Century Dictionary of the English Language*, 1977:1400, 1411). “An insufficiency of the material necessities of life” (*Encyclopaedia Britannica* 1969, vol. 18:392). As early as the 19th century, poverty was associated with the pressure to obtain basic means of survival. In *The Century Dictionary: An Encyclopedic Lexicon of the English Language* of 1890 (vol. 4: 4660) poverty is described as “need or scarcity of means of subsistence; needy circumstances; indigence; penury”.

Based on these definitions, the most common and generally accepted description used internationally for poverty is that condition of life where the majority of people lack sufficient resources to supply their basic needs for survival. Poverty furthermore does not only refer to the presence or absence of resources; it is also expressed in the inability to produce these resources (May 1998; Wilson & Ramphela 1989; Lötter, 2000; Leon & Walt 2001; World Bank 1999 & 2002; United Nations Human Development Report 1999; OED Online, 2006).

From this discussion of poverty it is clear that it is primarily linked to people's inability to provide for their basic needs. In other words, it indicates the socio-economic status of people and communities, together with its impact on just about every aspect of their lives.

### **2.2.2 Other usages**

The meaning and usage of the word “poor” extend beyond the socio-economic sphere. Our empathy for a person is sometimes expressed by using the word. As I have pointed out earlier, one could, for example, refer to “...that poor person whose father passed away”. Poor as descriptive term is



also applied to nature and other objects. A well-known example is to refer to soil which is not very fertile as “poor soil”.

In some indigenous cultures the concept of poverty is not linked to economic poverty (e.g. the scarcity of consumer goods), but is rather used in the context of isolation in respect of social relations (Mander, 1991:252). Sahlins, in his book *Stone Age Economics* (1972), as cited by Mander (1991:253), for instance has the following comment about poverty among the Khoi people: “Poverty is not a certain amount of goods, nor is it just a relation between means and ends; above all it is a relationship between people. Poverty is a social status....”. This view of poverty has a clear non-economic status attached to it.

### **2.3 Different forms of poverty**

Although poverty is a fairly standard term for that condition of life in which the majority of people do not have sufficient resources to provide for their basic survival needs, it can be expressed in different ways. I discuss some of the faces of poverty in the following paragraphs.

#### **2.3.1 Absolute poverty**

According to the United Nations report on poverty (*1998 Report on overcoming human poverty*), absolute poverty is the condition in which an individual, family or group of people have no or very few resources for supplying their daily needs. In other words, it indicates a specific degree of poverty. Beisner (1995) explains that absolute poverty among others indicates people who do not have jobs or are unable to work. Lacking any form of income, such people are completely dependent on others for their daily needs.

#### **2.3.2 Subsistence poverty**

Subsistence poverty can also be regarded as a degree of poverty. It relates to people who have some form of income and/or resources which can be used to supply their most basic needs. However, their standard of living is much lower than that of the average person in a society. According to Beisner (1995), people exposed to subsistence poverty do have some disposable income, but are unable to save money or other provisions. People who live at the level of subsistence poverty run a serious risk of being reduced to

absolute poverty when an emergency strikes, for example, natural disasters or loss of employment.

### **2.3.3 Chronic poverty**

Chronic poverty as a type of poverty is primarily collective. It normally relates to a family or a group of people (Lötter, 2000:119). This form of poverty develops over a long period, mostly over generations, and those who are trapped in it cannot escape easily.

An example of chronic poverty can be found in the lives of a large number of rural black people in South Africa. In most of these cases, the poverty is passed on from one generation to another. Because the new generation, in a manner of speaking, inherits the poverty from the previous one, and does not create new opportunities, the level of intensity of the poverty can increase in some cases. This could be regarded as a form of “terminal poverty”.

### **2.3.4 Transitional poverty**

Another form of poverty is transitional poverty. This mainly occurs in cases where there is economic instability. It is mostly an unexpected form of poverty, and can affect anyone. May (1998:6,8) links it to a negative outcome of change; it is normally manifested in cases where people unexpectedly lose their jobs. An example is the way in which thousands lost their jobs after the terrorist attacks on the United States on 11 September 2001. This particularly affected airline workers worldwide.

Transitional poverty brought about by unforeseen loss of employment and income can be exacerbated where there is insufficient unemployment insurance or where the worker has not made provision for emergencies. However, it is regarded as transitional poverty because unemployed people can find jobs again after some time. This type of poverty is mostly found in countries where employment opportunities do exist.

### **2.3.5 Spatial poverty**

May and Rogerson (1998:208) distinguish spatial poverty. They argue that poverty and a tendency to poverty can be linked to the place where people live as well as their geographic area. For instance, they point out that people who lack access to transport find it more difficult to find jobs than do people who have such access. People wish to live close to public transport in order

to reach their workplaces. The result is an increase in migrant labour and urbanisation. However, the migration to urban areas has led to an increase in poverty. According to the World Bank's poverty report (1996) the majority of the world's poor communities live in urban areas.

A research report by Sachs, Mellinger and Gallup (2001), published in *Scientific American*, further indicated that poverty and the distribution of wealth largely correlated with the geographic location of countries. This explains the divide between the mostly affluent North and the poor South.

### **2.3.6 Susceptibility poverty**

In his discussion of poverty Lötter (2000:118) refers to instances where people have a particular susceptibility for poverty. This mainly relates to cases where people have specific skills within their own culture and technology, but are unable to transfer and/or use them in new, changing circumstances. A typical example of this type of poverty would be a well-trained person who struggles to find employment in the information technology-driven economy owing to an inability to master this technology.

Mander (1991) has done an in-depth study of the impact of Western technology on Native Americans. One of his main findings was that exposure to modern Western technologies has contributed to the impoverishment of Native Americans.

## **2.4 Different levels of poverty**

Three levels of poverty can be distinguished, *viz.* individual, family/group and regional/community poverty. May (1998:5) points out that the intensity and impact of poverty are both determined by the level of poverty. The three levels are briefly discussed below.

### **2.4.1 Individual poverty**

Individual poverty is related to cases where isolated individuals in a community suffer from some kind of poverty. In such isolated cases, the impact of the poverty is mostly limited to the life of the individual concerned, and the community also finds it easier to become involved by rendering assistance.

### **2.4.2 Family/Group poverty**

Family and group poverty occur where the main breadwinner(s) of a family or group of people are without income due to amongst others a loss of employment, death or serious illness.

The impact of this type of poverty is greater since it mostly affects larger groups or families. When an extended family structure is affected, it often impacts on a number of children and elderly people, since two or three generations of a family sometimes live together. In most cases, there is no one in such family groups who can take over the role of generating income.

The effect of poverty at this level is exacerbated by the fact that the economic organisation of these extended family structures, which to a large extent formed the system which provided social protection, has in most cases disintegrated (Lötter, 2000: 120).

### **2.4.3 Regional and community poverty**

Regional and community poverty is generally used to describe a particular community or region where most of the people live in poverty. The Orange Farm region in Gauteng, South Africa, is an example of an impoverished community. Most of the inhabitants live below the breadline and there is a high unemployment rate. In addition, there is a lack of basic services, people have little say in political decision-making on issues affecting their futures and they generally live in unhygienic conditions. Another characteristic of community poverty is overpopulation, without the infrastructure required for the basic needs of these people (Lötter, 2000).

## **2.5 Causes of poverty**

Pinpointing the causes of poverty is crucial, since these causes provide a point of departure when seeking possible solutions for poverty. Because poverty is a complex and multidimensional phenomenon, its causes cannot be reduced to a single one or a few causes. It is also important to understand and interpret the causes of poverty within specific socio-cultural and economic-political contexts.

Organisations, research bodies and scientists studying the causes of poverty are generally found in the economic, social and medical science sectors (Lötter, 2000:119, World Bank, 2002 and Wilson & Ramphela, 1989:14).

Their studies utilise various scientific methods, both quantitative and qualitative. The World Bank (2002) in particular has in recent years focused strongly on participative research, to determine how poor people themselves feel about poverty and what they regard as the causes of and solutions for poverty.

Based on the research done by May (1998), the World Bank (1998, 2002), the United Nations (*Human Development Report*, 1999), Wilson and Ramphela (1989), Adcock (1997), Sachs *et al.* (2001) and Lötter (2000), a number of causes of poverty can be identified. These are:

- Economic systems.
- Political systems.
- Geographic distribution.
- Gender issues.
- Forms of rendering assistance.
- Extraordinary circumstances.
- Individual causes.
- Poverty as a cause of poverty.

I will describe these in the following paragraphs.

### **2.5.1 Economic systems as cause of poverty**

When considering the role of economic systems in creating poverty, the following aspects are, among others, relevant:

- The way in which economic systems regulate the distribution of products and services in the market. Are they purely based on free market forces or has provision been made for the equitable distribution of collective goods and services? This question is of particular interest to the new paradigm of globalisation and information based economies.
- Is the distribution of wealth in a country fair? To find the answer to this, the *Gini* table is used which measures the distribution of wealth in countries.
- The role of the public and private sectors in regulating economic processes. For instance, is there scope for deregulating economic processes and to what extent is control exercised over the creation of monopolies in the market?

- To what extent does an economic system succeed in creating job opportunities?
- To what extent do economic systems make money and other resources easily accessible to poor people? For instance, do excessively high interest rates apply to poor people?
- What are the spending patterns and priorities of poor people? Do they for instance spend more on cell phones than on basic provisions such as food?
- What is the impact of macro-economic trends such as inflation and recessions on economic growth?
- In recent years the role and impact of globalisation of the world economy on countries and regions are also receiving greater attention. Has globalisation for instance contributed to the creation of greater wealth or have poor countries, which are not part of the global world economy, been further isolated and impoverished?

### **2.5.2 Political systems as cause of poverty**

Apart from economic causes, political systems can certainly be regarded as one of the main causes of poverty. Political factors that should be taken into account that can contribute to poverty include the following:

- The type of political system. For instance, is it repressive and is the majority of the population excluded from political and economic decision-making?
- Are basic services such as health, energy, telecommunications and housing provided to poor communities and if so, what is the quality of the services rendered?
- Closely related to the previous question is the question of whether poor communities are given the opportunity of participating in the decision-making processes that affect their future. Do poor communities have the economic and political power to change and/or influence political decision-making processes? For instance, how much say do poor communities have in determining the priorities of the basic services that have to be provided to them?
- Is legislation such that poverty is combated? This includes the extent to which workers are protected (labour laws, scope given to unions) as well as the political will of a government to provide general social security for all citizens (state pensions, health services).

- Another important cause of poverty can be found in ineffective government and political corruption.

### **2.5.3 Geographic distribution as cause of poverty**

As early as the 18th century the economist Adam Smith pointed out that wealth is not only determined by the application of the free-market system, but also by the geographic location of a country. As I have pointed out in section 2.3.5, geographic location (see the report of Sachs *et al.*, 2001) is regarded as one of the primary causes of poverty. Research into this area is mainly based on macro-economic principles and geography. Some of the variables to be examined are:

- Is there access to harbours and if so, is such access cost-effective?
- To what extent are people excluded from meaningful participation on the internet due to their location as well as physical address. There is growing concern that the internet is shrinking due to geographical exclusion of people.
- Are there large rivers that can be used for the effective transportation of people and products?
- What are the nature and quality of the soil and are products being cultivated that are suitable for the climate?
- Do natural disasters such as earthquakes and floods occur regularly and what is their impact on the economy?
- Is there an abundance of natural raw materials?

### **2.5.4 Gender as cause of poverty**

Discrimination (particularly economic discrimination) against a particular gender also leads to poverty. Studies indicate that women in particular are victims of discrimination (May *et al.*, 1998:48-80; Adcock 1997:135 and World Bank, 2002). Studies of the impact of gender discrimination focus on the following aspects, among others:

- The role of culture and politics in the suppression of a gender.
- Is there discrimination in allocation of information related jobs in the new information and knowledge society?
- The way in which such suppression is exercised. For instance, are women prevented from working or studying, or even prohibited to do so? Are they paid less for equal work?

- Does gender discrimination occur in households? In a patriarchal system, for instance, are women excluded from economic decision-making at home?

### **2.5.5 Forms of rendering assistance as cause of poverty**

The ways in which assistance is rendered to poor communities as well as their reaction to such aid, lead to the question of whether rendering assistance could actually perpetuate poverty. Factors that support poverty can be deduced from the answers to the following questions:

- Is the assistance of such a nature that poor people are taught to be self-sufficient or does it increase their dependence on those rendering the assistance?
- What expectations does assistance create among the poor? For instance, could poor people come to the conclusion that those rendering aid are now duty bound to look after them and that they themselves need not contribute to alleviating their own poverty?

### **2.5.6 Extraordinary circumstances as cause of poverty**

Poverty can also be caused by exceptional circumstances such as natural disasters, drought, epidemics, war and violence.

Studies are normally made of the economic impact of such exceptional circumstances on people's quality of life. The effect of violence and criminality on the economic growth rate of a country can, for instance, be measured.

### **2.5.7 Individual as cause of poverty**

Poverty is not only caused by exceptional circumstances or by economic or political decision-making. Poverty can sometimes even be caused by the individual him/herself and the following factors play a role:

- What are the level and standard of education of the individual and what effect does this have on poverty?
- Do variables such as a lack of talent and abilities contribute to poverty?
- Is the will to work lacking?
- What is the community's attitude toward individuals who are responsible for their own poverty?



- In cases where poverty is caused by the individuals themselves, questions should also be asked about the role of culture and the socio-political context within which such individuals grew up.

### **2.5.8 Poverty leads to further poverty**

Research is also being done about the extent to which poverty is carried over from one generation to another. Research questions include:

- Are children more inclined to follow the example of parents who do not work?
- Does the lack of funds in one generation prevent the next generation from being able to afford formal education and as a result cause them to enter the career market at a disadvantage?
- Do historical conditions such as slavery or other forms of suppression contribute to a cycle of poverty from which people find it hard to break free?

### **2.6 Measuring poverty**

It is evident that poverty is a complex phenomenon and that its causes are multi-dimensional. Measuring poverty is accordingly also problematic. On the one hand it is possible to measure poverty statistically and quantitatively. The World Bank, for instance, uses statistical methods and measures poverty by means of a poverty line. Such a poverty line divides rich and poor and is normally based on a minimum standard of living expressed in the buying power of individuals. In the World Bank's (1998) poverty line people live below \$1 (US) a day. However, such statistical profiles only partially reflect poverty.

Poverty also has a qualitative, non-statistical element which is among other things expressed in human experiences (Adcock, 1997:128). It might best be described in the words of a citizen of Ghana: "Poverty is like heat: you cannot see it, you can only feel it: so to know poverty, you have to go through it" (*Can African claim the twenty first century*: 2000:85). Poverty therefore extends beyond the quantification of income, possessions and the lack of basic services to cover how people feel about and experience their poverty.

To obtain the full picture of poverty, it is essential to measure it quantitatively as well as qualitatively. Based on the analysis done by Lötter

(2000:110-118) I distinguish the following standard qualitative and quantitative measures of poverty.

## **2.6.1 Quantitative measures**

### **2.6.1.1 Income and work**

Income comprises more than the monthly income measured in terms of money. Other sources of income are taken into account, such as land which is possessed and the trade of products. Measuring income is problematic. It is difficult to find international comparisons of disposable income. According to Wilson and Ramphele (1989:54, 71) disposable income should be measured in terms of the value and purchasing power of money in a particular country. Lötter (2000:108) further points out that measurement of income does not always take into account expenses and ways of spending. People with an income above the so-called poverty line can, for example, live in poverty if money is spent on the wrong priorities or if there are essential medical expenses.

When work is studied as a variable, one should take into consideration the number of people who have permanent or non-permanent work and the benefits (pension, medical). The number of unemployed persons is also measured, specifically the number of unemployed persons in a particular household (May, 1998:45, 80). It is also important to note how long someone has been unemployed and whether alternative employment opportunities exist.

Apart from income and work, poverty is sometimes also measured against the spending patterns of poor people, for instance how resources are prioritised in poor households and on what poor communities in general spend their money.

### **2.6.1.2 Health**

Health is one of the most important criteria for measuring poverty (Wilson & Ramphele, 1989:99-120). In principle it relates to a person's ability to care for him/herself. Some of the variables that play a role are the life expectancy of people, the number of child deaths below the age of five years, child malnutrition, the diet followed by communities, access to water and the quality of the water, typical illnesses presenting in certain regions

(e.g. cholera and malaria), as well as the costs and affordability of medical services.

Africa, which is regarded as the poorest continent, has the highest percentage of deaths among children below the age of five years. According to statistics from the World Bank 157 children out of every 1000 die under the age of five years in Africa. In Asia the ratio is 53 out of every 1000 children and in developed countries the ratio is 9 out of every 1000 children (*Can Africa claim the twenty first century*, 2000:86).

#### 2.6.1.3 Access to services

This level of poverty is measured in terms of the ability/inability to access basic services in a community (Wilson & Ramphele, 1989:62-5). These services include energy supplies, sanitation, libraries, telecommunications facilities, postal services, protection services and social security services such as old-age homes. In some surveys the quality and cost of services are also taken into consideration if they are indeed provided. The measurement of the costs of energy needed to prepare food is particularly important.

#### 2.6.1.4 Accommodation and clothing

Accommodation and clothing is another variable used to measure poverty. Among other things the number of people living in a specific dwelling is taken into account, as well as the size of dwellings (e.g. the number of persons per room), the quality of the dwellings and whether the dwellings are owned or rented (May, *et al.*, 1998:43; Wilson & Ramphele, 1989:123-130).

Clothing as a variable is specifically related to whether people are capable of dressing according to weather conditions – for instance, whether they have enough clothes for winter.

#### 2.6.1.5 Education

Education can be regarded as one of the core criteria for the measurement of poverty. The focus is not only on the education of children, but also on the nature and quality of adult education. Furthermore, attention is given to aspects such as the period of time during which someone received an education, the quality and level of training, literacy levels and whether people were trained for specific professions. Another important variable to

consider is how much governments have budgeted for education. Linked to this is the amount parents have to pay out of their own pockets for the education of their children. In the following chapters I will illustrate the close relationship between the lack of education and information poverty.

## **2.6.2 Qualitative measures**

### **2.6.2.1 Self-respect and dignity**

Self-respect and dignity are moral concepts and are related to determining how a person respects him/herself (Lötter, 2000:113). Human dignity among other things reflects a poor person's confidence in him/herself. Together with someone's own opinion of him/herself, this measurement also considers the opinion of such a person which is held by other people and communities. Poor people lose their self-respect more easily because they do not feel fully part of the community. Poor people are more exposed to the public view because of their greater economic dependence. This loss of human dignity is often accompanied by a feeling of powerlessness.

### **2.6.2.2 Insecurity**

Moor (2001) correctly indicates that the need for security is one of the core values of any community. Where this is affected, the heart of a community is threatened. Poor people are often more exposed to unsafe environments (May, 1998:41, 54). This does not just relate to robbery and murders, but also to domestic violence and family abuse. According to Wilson and Ramphela (1989:159-60), domestic violence and abuse in poor households are often caused by alcohol abuse.

### **2.6.2.3 Lack of participation in the lifestyle of the community**

In the era of electronic media and marketing poor people are much more exposed to new and expensive products. However, the problem is that these products cannot be acquired. They are for the enjoyment of the "rich" only. The experiences of poor people in respect of this disparity in disclosure (marketing) and possession (for the rich only) are sometimes measured (Lötter, 2000:114).

In some cases extreme social pressure is placed on poor people to participate in this lifestyle. This can result in miss-spending of scarce money or cause poor people to withdraw totally from social life. As a consequence, poor people can react with anger or reproach against the community. This

disparity is sometimes also seen as a justification for stealing from the rich. According to Lötter (2000:115), however, most poor people accept their lot over time.

#### 2.6.2.4 Distrust of society

Finally, poverty can be measured in terms of how much poor people trust or distrust their government and organisations that provide basic services. It has already been indicated that poor people often distrust their governments and other political institutions. The primary reason for this is that poor people have no real political clout and that they furthermore believe that politicians do not really have their interests at heart. This is why much greater trust is placed in religious and indigenous organisations. (May, 1998)

### **2.7 Results and impact of poverty**

The above discussion of poverty makes it clear that it has an enormous impact on people and on society as a whole. People suffer from hunger, children die owing to malnutrition, crime increases and the development of communities is hampered. May *et al.*, (1998:44) add that many poor people suffer from constant emotional stress because they are in most cases engaged in a daily struggle to survive.

Wilson and Ramphela (1989:175) further found in their research that poverty causes families to fall apart. These authors have found much evidence of especially black families (women) in rural areas in South Africa whose family lives were destroyed by the men's departure to the cities to seek work. In many cases, the men never returned and their families that remained behind never heard from them again.

Children are also seriously affected by poverty. In most cases, children suffer from malnutrition and are therefore more vulnerable to illnesses and early death. The disintegration of families also creates unstable environments for children. This in turn leads to child prostitution, sexual abuse and drug and alcohol abuse (May *et al.*, 1998:32-33). The lack of recreation and sports facilities for children in poor areas also contribute to an increase in these social evils.

Poverty has an equally harsh impact on women. In South Africa its effects are particularly severe for black women, widows, divorced and unemployed

women. It is aggravated in cases where cultural, political and economic discrimination against women is found. (Wilson & Ramphela, 1989:175).

Elderly people also cannot escape the effects of poverty, particularly in cases where there is no social provision for older people who can no longer work. The emphasis is on the role of the state together with the responsibility of social structures (e.g. families) to care for their older relatives.

Wilson and Ramphela (1989:176) point out that the loss of employment by a person close to retirement age can have serious implications for his/her own life and that of his/her family. This is especially true of people who are retrenched at the age of 50-55 years and who are unable to find work again. Normally such a person would have earned a fairly good salary and had financial commitments, for instance providing for the education of children.

Lastly, disabled people in poor communities are also seriously affected, because there is seldom any provision for disabled persons. This is not only applicable to poor areas.

## **2.8 Morality and poverty**

This analysis of poverty and specifically of its results makes it clear that billions of people worldwide are affected on a daily basis (World Bank, 1999/2000). Poverty affects the lives of people. It gives rise to practical questions such as: Where will my next meal come from? How can I feed my child? Where do I take my sick child? Where can I sleep tonight where I will be protected from the cold?

Poverty furthermore causes an imbalance between power and dependence. Poor people have in most cases no or almost no possessions or property and for this reason very little power or control over their lives and the necessities for their basic needs. The power and control is largely in the hands of the haves, and the have-nots are dependent on them. This imbalance leads to the abuse of power (cheap labour, exploitation etc.) and feelings of fear, anger and helpless acceptance by poor people. It means that poor people are not really able to exercise their internationally recognized human rights and in the process the core of their human dignity is seriously affected.

It is thus clear that poverty and its results have a significant moral dimension which directly impacts on the life and human dignity of poor people. This

means that society cannot evade the issue of its moral responsibility toward poor people.

In following Rawls (1971) I strongly argue that part of this moral responsibility is the need for in-depth attention to creating a social justice which would among other things provide for a more equitable distribution of wealth between people, implementation of fair and just remuneration practices and punitive justice in cases where poor people are exploited by the powerful. Social justice is also expressed in equal treatment of all people – rich or poor – and the recognition and guarantee of human freedom. This expression is articulated within different contexts and cultures. It is clear, however, that poverty essentially affects the freedom of poor people because in most cases resources (money, food, housing) are needed to express freedom. Most poor people do not have such resources.

I am convinced that the modern information and knowledge society needs to be confronted by the question of the extent to which the problem of poverty is addressed by existing political, economic and social structures. One can indeed ask the question: Do these structures comply with the norms of social justice, freedom and equality?

## **2.9 Conclusion**

In the light of the analysis of poverty, I argued that poverty is a complex phenomenon and that the causes of poverty are multidimensional. It further means that there is no single or just a few solutions for the problem.

Secondly, poverty is an individual problem within a societal context which should rather be understood and interpreted within a economic-political and socio-cultural framework. The “blame” for poverty can rarely be placed on individuals. Poverty is also no respecter of persons.

Thirdly, the impact of poverty on people and the environment is enormous. It does not only affect the quality of life of billions of people, but in many cases their dignity and humanness. For this reason poverty and its implications have a strong moral claim on society.

In Chapter 3 I will discuss the concept of information, in particular the relationship between information and poverty as it has been set out in this

chapter. Chapters 2 and 3 form the framework for Chapter 4 in which I will deliberate on the notion of information poverty in detail.