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A Critique of Development Participatory Communication Discourse, its Translation into Internet-based International Development Policy for Poverty Reduction, and Implications for African National ICT for Development Policy.

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Dissertation Submitted for the Degree of Masters in Media Studies
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15 February 2013

DECLARATION

I declare that this research project is my own work. It is submitted for the degree of Master of Arts by Research in Media studies at the University of the Witwatersrand. This work has not been submitted for any other degree or examination at this, or any other university.

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15 February 2013

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Abbreviations

AISI	African Information Society Initiative
CDA	Critical Discourse Analysis
CIDA	Canadian International Development Agency
CSOs	Civil Society Organisations
DANIDA	Danish International Development Agency
DFID	Department for International Development
DOI	Digital Opportunity Initiative
ECA	Economic Commission for Africa
ESAP	Economic Structural Adjustment Programme
GATS	General Agreement on Trade in Services
GDP	Gross Domestic Product
GII	Global Information Infrastructure
GIIC	Global Information Infrastructure Commission
GOR	Government of Rwanda
G8	Group of 8
HITD	Harnessing Information and Technology for Development
ICT4D	ICT for development
ICTs	Information Communication Technologies
IDRC	Canadian International Development Research Centre
IFAD	International Fund for Agricultural Development
IFI	International Finance Institution
IKEs	Information and knowledge economies
IMF	International Monetary Fund
IT	Information and Technology
LDC-IV	Fourth Conference on the Least Developed countries
MDGs	Millennium Development Goals
MINECOFIN	Ministry of Finance and Economic Planning
NICI	National Information and Communications Infrastructure
NORAD	Norwegian Agency for International Development
OLPC	One Laptop per Child
PICTURE-Africa	Poverty Nexus by Poverty, ICT in Urban and Rural East Africa
PRP	Poverty Reduction Paradigm
PRSPs	Poverty Reduction Strategy Papers
SDNP	Sustainable Development Networking Programme
SIDA	Swedish International Development Agency
UN	United Nations
UNCED	UN Conference on Environment and Development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
USA	United States of America
USAID	United States Agency for International development
WSIS	World Summit on the Information Society
WTO	World Trade Organization

Chapter 1

1.1 Introduction and background

Since the emergence of the international development discourse, development has evolved through three main paradigms namely modernization, dependency and participation (Servaes, 2003). The participation paradigm which emerged in the 1970s, maintains that the participation of poor communities in knowledge sharing processes is key to ensuring that development policies are grounded in people's experiences and real needs (Mangstl, 2003; Servaes, 2006). Consequently, the development participatory communication theory was conceived to support sharing and learning processes in participatory development theory. Development participatory communication theory is different from participatory development theory because of its communication focus (Mefalopulos, 2008). Both theories are, however, rooted in the notion of participation of communities in development processes to achieve sustainable development.

Development participatory communication discourse was initially linked to traditional media such as radio, film, photography, and television, which were used to facilitate dialogue between stakeholders in order to enhance knowledge sharing and learning (Mefalopulos, 2008). The advent of modern Information Communication Technologies (ICTs) in the 1990s such as the internet, e-mail, computer, mobile phones, digital cameras, databases and portals, has witnessed a shift from the discourse's focus on traditional media to emphasis on ICTs as tools for effective participation and poverty reduction (Quarry and Ramirez, 2009). Based on development participatory communication theory, the United Nations Millennium Development Goals (UN MDGs) which guide international poverty reduction strategies cite the use of ICTs to facilitate the participation of all people in sustainable development as MDG 8 (see UN MDG Declaration Report, 2001). In this regard, various international development agencies have assisted developing countries, especially African countries, to create national ICT policies aimed at guiding poverty reduction strategies.

1.2 Objective of the Study

This study critiques the discourse associated with the use of the internet for poverty reduction within development participatory communication theory and analyses how this discourse is translated into development communication policies in poverty reduction strategies of international development organizations. In the light of findings, the study then examines implications of the influence of the discourse on African ICT-based poverty reduction strategies. To do this, the study focuses on the ICT for development policies of the United Nations Development Programme (UNDP's), the *Digital Opportunity Initiative* (2001), known as the *DOI a*nd the United States Agency for International Development (USAID's) *Leland Initiative* (1996*)* to examine how the poverty reduction narrative within these policies is influenced by development participatory communication discourse. To investigate implications for the influence of the discourse on African countries the study examines Rwanda's national ICT policy also known as National Information and Communications Infrastructure (NICI) sets of strategies.

The study selected to study the ICT for development policies of the UNDP and USAID because the two international development agencies are key players in the international poverty reduction sector. Both organisations provide advice and technical assistance for governments, institutions and rural communities on the realization of the UNDP MDG1, the eradication of extreme poverty and hunger. The UNDP and USAID are crucial actors in the global information society, which plays a central role in the formulation of ICT-based communication for development polices to enhance global cooperation in the fight against poverty (see Digital Opportunity Taskforce, 2002). In Rwanda, the UNDP and USAID funded and played an advisory role in the formulation of the country's ICT policy through their involvement in a National workshop on Information and Communication Technology Policy and Strategy for Rwanda, held in Kigali from November 30 to December 3, 1998 (see Rwanda Overall NICI Draft Policy, 1998). The study therefore focuses on studying the rhetoric in the *DOI* (2001) and the *Leland Initiative* (1996) to find out the influence of the UNDP and USAID ICT discourse on Rwanda because the two policies represent the agencies' ICT for development perspective at the time that they assisted the country in the formulation of her national ICT policy. Furthermore, the USAID and UNDP influenced the rhetoric in Rwanda's national ICT policy through

their influential role in the creation of the African regional ICT strategy, the African Information Society Initiative (AISI) which guides the formulation of most African national ICT strategies (see Chiumbu, 2008).

1.3 Problem Statement

While the emerging development participatory communication discourse claims bottom-up approaches to communication, its rhetoric is heavily influenced by earlier top-down theories of communication, a tendency leading to the discourse perpetuating linear development communication processes (Kothari, 2005; Cornwall and Brock, 2004). One of the earliest post-World War II theories of development, the modernization paradigm, believed that underdeveloped countries could be modernized through the reproduction of western socio-economic and political models of modernity in underdeveloped countries (see Melkote, 1991). Modernization theory relied on mass media to disseminate development messages to mass audiences in underdeveloped countries. Audiences were perceived as ignorant, hence they were expected to receive mass media messages and change their "backward" behaviour to become modernised. This top-down conception of development was problematic because it ignored local knowledge, needs and aspirations (see Mefalopulos, 2008; Servaes, 2003).

Following widespread criticism of top-down approaches to development towards the end of the 20th century, participatory communication theory was conceived to create equal partnership between development professionals and local communities characterised by mutual sharing of knowledge in order to build consensus for development (Chambers, 1992). Although participatory communication theory claims to put people at the centre of development, its discourse does not address power struggles inherent in society which tend to affect participation processes (see Leeuwis, 2000; Huesca, 2000; Kothari, 2005). This often leads to the perpetuating of top-down development tendencies as development experts are left with the power to control participation and define the legitimacy of development knowledge according to pre-determined institutional goals (see Mosse, 1994; Waisbord 2008). Despite the participation rhetoric, Escobar (1995) and Van der Velden (2002) observe that development has remained linear and unchanged, a situation likely to cause the

exclusion of poor people's knowledge from ICT-based knowledge production processes as development experts use ICTs to promote top-down communication.

In the light of the highlighted power limitations of participatory communication theory, the study seeks to examine the ICT for development policies of the UNDP and USAID to find out how participatory communication theory is translated into development communication policies of international development agencies. Subsequently, the study explores the influence of the UNDP and USAID ICT for development discourse on the rhetoric contained in Rwanda's national ICT policy. Although past studies indicate that the creation of the Rwanda's national ICT policy was heavily influenced by international donors (see Bowman, 2009), no effort has been made to analyse implications for the influence of donors on the poverty reduction discourse within the country's ICT strategy. Chiumbu (2008) however states that the influence of international ICT for development discourse on the formulation of African ICT for development strategies can have serious implications for their poverty reduction strategies. Her study states that the implications of foreign ideological influence on African ICT policies includes lack of ownership of national ICT policies by African governments, tensions between interests of donors and government and creation of policies that are often out of tune with African country's realities (Chiumbu, 2008). Rwanda's national ICT policy has also been glorified for its ability to integrate the use of ICTs into national socio-economic development goals but the extent to which Rwanda's e-strategy enables local communities, especially the poor, to participate in knowledge production processes has not been questioned (Dzidonou, 2002, 1999; Wilson, 2006). The study helps to bring to the fore the issue of knowledge production, often neglected in participatory ICT for development discourse as most studies tend to focus on technology and information spread (see IFAD event WSIS, 2003). Emphasis on investigating knowledge production paradigms also contributes towards efforts to address the important question of "whose knowledge counts?" in development participatory communication models and further provoke enquiry into implications for poverty reduction policies in Africa (see Chambers, 1992).

The development agenda was not critically questioned, until the 1990s when post-development theory started contesting the very meaning of development, its

desirability and goal (Rapley, 2004). Influenced by post-structuralism, post-development theory views development as a discourse created by developed countries to benefit them rather than the so called 'intended beneficiaries" (see Escobar, 1995; Crush, 1995; Sachs, 1992 and Rahnema, 1997). The development agenda, according to Escobar (1995), has since 1945 continued to be a top-down ethnocentric approach, deliberately excluding the very people it is supposed to serve. Post development theory concludes that development's actual goal is human control and domination by incorporating autonomous communities within the networks of the power of developed countries. Unlike participatory development theories which criticise top-down development paradigms and offer alternative "bottom-up" approaches, post-development theory totally rejects all the prevailing notions of development, including participation. The post-development view sees alternative development or participatory development as more insidious than linear development because of its friendly exterior which is used to persuade developing countries to consent to the implementation of development programmes designed to exploit and dominate them (Mathews, 2005; Cornwall and Brock, 2004). Post development theory calls for the need to dethrone development and pursue radical alternative visions of improving social life based on local perspectives.

The study critically examines the discourse in development participatory communication theory from post-development perspectives. The study shares the post-development theory belief that the development agenda has not been a success. The Global Monitoring Report (2011) indicates that 82 per cent of the world's 925 million hungry people live in developing countries. This clearly shows that development's attempt to reduce the gap between rich and poor countries has been a failure. While most regions are reported by the same report to have reduced the number of people living in poverty over the past ten years, Africa is reportedly lagging behind with 17 countries being far from halving extreme poverty. The global development scenario is equally gloomy. According to a report on the Fourth Conference on the Least Developed countries (LDC-IV) held in May 2011, only three countries have graduated from LDC status, and the number of LDC's has actually grown from 24 in 1971 to 48 currently (see Trevor Davies in *The Zimbabwean* 2 June, 2011). In the light of frustrating reports, more than two thousand non-governmental organisations attending the LDC-IV conference, reportedly argued that all previous

dominant development theories have failed and called for a new approach to development. Participation has been repeatedly cited as a key tool in international development poverty reduction strategies, yet inspite of decades of broadening and sharpening development participatory tools, poverty has continued to increase in Africa.

Despite the relevance of post-development theory, very little work has been done to critique the development discourse, especially in the African context. Most studies of development participatory communication approaches in Africa have tended to evaluate the impact of participation methods and recommended specific improvements without questioning the underlying assumptions made by the paradigm (see Frischmuth, 1997; Hagmann, Chuma and Murwira, 1997; Harnmeijer, Bayer and Bayer, 1999). The study utilizes a critical discourse analysis approach from a post development perspective to question participatory development paradigms. Such an approach provides a holistic framework capable of addressing the origins of development problems in Africa as opposed to piecemeal methodological adjustments which do not deal with the root causes of development challenges (see Crush, 1995; Escobar 1995). There are very few post- development critiques, with most of them originating from the West (see above cited post-development scholars). Very few development critiques have originated from Africa up to date. This study joins a handful of African scholars who have recently started critiquing the development discourse and these include Dahl and Megerssa (1995), Ela (1998), N'Dione et al. (1997), Mathews (2005) and Chiumbu (2008).

This study contributes to the growing body of knowledge on African perspectives of post-development theory by using the discourse analysis approach to examine the implications of the influence of development participatory communication discourse on African national development communication policy in poverty reduction strategies. Revelations of the discourse's flaws and its influence on development policy will challenge development decision-makers to rethink participatory development communication policies and seek genuine people-centred development paradigms. At a regional level, an analysis of implications of the discourse on African national development communication policy will stir debate among African scholars

and decision-makers to critically question the development agenda and seek alternative development paradigms based on local values, needs and aspirations.

1.4 Research questions

To critique the translation of development participatory communication theory into ICT for development communication policies of international organizations, and examine implications for the influence international ICT for development discourse on Rwanda's national ICTs policy, the study is guided by the following research questions;

i) How is the ICT for development rhetoric found in development participatory communication theory translated into ICT for development policies of the UNDP and USAID?

ii) What are the implications of the influence of UNDP and USAID ICT for development discourse on the poverty reduction rhetoric within Rwanda's national ICT policy?

1.5 Rationale

The study focuses on development participatory communication theory because of the researcher's personal interest in development issues. The negative impact of development policies such as the Economic Structural Adjustment Programme (ESAP) in Zimbabwe[1] in the 1980s triggered the researcher's interest in studying the influence of development discourse on African national development policy. Past critical studies of development participatory communication paradigms indicate that power plays an important role in participation processes with potential to negatively affect the marginalised. The study utilizes the Critical Discourse Analysis (CDA) approach to critique the use of language within historical context to investigate both explicit and hidden expressions of power in development participatory knowledge sharing paradigms. CDA is a research method "interested in analysing opaque as well

[1] Like most African countries, Zimbabwe went through an IMF imposed Structural Adjustment Programme (SAP) in the mid 1980s aiming to create economic growth in the country. ESAP relied on top-down approaches to economic development whereby key financial international institutions such as the IMF and the World Bank prescribed development solutions to developing countries as a pre-condition for providing aid.

as transparent structural relationships of dominance, discrimination, power and control as manifested in language" (Wodak and Meyer,(2009: 10). The approach therefore enables the study to uncover power dynamics at play in the conceptualization of theories, which inform policies that directly inform practice (Wodak and Meyer, 2008; Escobar, 1995). Of central interest is the implication for the influence of certain representations of power in the international development sector on African national poverty reduction strategies.

As stated earlier, there has not been much research done by African scholars to critique the development discourse from post-development perspectives. Chiumbu (2008) makes an immense contribution towards questioning the influence of external players on the formulation and implementation of the African regional ICT for development policy, the African Information Society Initiative (AISI). This study examines the influence of development participatory communication discourse on a specific African national ICT for development policy. While Chiumbu's study analyses the development discourse emanating from transnational epistemic communities, and international development agencies, this study examines the participatory development communication discourse espoused in the policies of specific international development agencies, which are part of the international development think-tank. Moodley (2005) utilizes a discourse analysis approach based on Michel Foucault's conception of discourses and knowledge to study the poverty reduction discourse within a specific African country's national ICT policy, namely that of South Africa, but he does not fully employ a post-development perspective.

While the study recognises that Africa is a huge continent with different socio-economic realities, there are some shared historical experiences. These include Africa's colonial past and neo-colonial experiences, which commonly affect the position of African countries in international relations. The study has selected to study the influence of development participatory communication discourse on Rwanda's national development communication policy because Rwanda was one of the first African countries to come up with a national ICT policy in 2000, just a few years after the adoption of the African regional policy framework, the African Information Society Initiative (AISI) in 1996. The influence of the development discourse in the AISI framework is prominent in Rwanda's ICT policy and AISI's discourse was

influenced by international development agencies such as UNDP and USAID among other players. African countries have often been advised to emulate Rwanda's policy (Dzidonou, 2002), hence it would be interesting to study implications arising from the influence of Rwanda's national ICT policy by development participatory discourse as consequences for Rwanda could possibly be experienced in other African countries. The study focuses on internet-based development communication policies in poverty reduction strategies because the internet is currently the most preferred ICT for development communication by international organizations (see WSIS, 2003).

1.6 Layout of Chapters

To answer its research questions, the study is divided into eight chapters. Chapter 1 explains why the research selected to study the ICT for development discourse within development participatory communication theory, ICT for development policies of international development agencies and Rwanda's national ICT policy. Chapter 2 provides background to the study's three case studies namely UNDP, USAID and Rwanda by analysing each entity's perception of poverty reduction and examining the role of the UNDP and USAID in the creation of African and Rwandan development policy. Chapter 3 provides literature review analysing existing critique of the ICT for development rhetoric within development participatory communication theory and mainstream ICT for development paradigms. The chapter then explains the theoretical framework guiding this study. Chapter 4 explains the research methods utilized to examine the translation of development participatory communication theory into the UNDP and USAID ICT for development policies and analyse the implications for the influence of the two international development agencies' policies on Rwanda's national ICT policy. Chapter 5 analyses the translation of development participatory communication theory into the UNDP and USAID ICT for development policies. The analysis specifically seeks to find out how the poverty reduction discourse associated with the use of the internet for poverty reduction in development participatory communication theory is translated into the UNDP and USAID ICT for development policies and further question implications for the participation of the poor in the use of the internet for creating knowledge for poverty reduction. Chapter 6 examines the role of the UNDP and USAID in the creation of Rwanda's national ICT policy and further analyzes the influence of the international development agencies' ICT for development discourse on the creation of Rwanda's national ICT policy. Furthermore,

the chapter critiques the poverty reduction discourse within Rwanda's national ICT policy. Chapter 7 then analyses implications for the influence of the international ICT for development discourse represented by the UNDP and USAID on African internet-based development communication strategies using Rwanda as a case a study. Finally, chapter 8 concludes the study by exploring the possibility of using post-development theory to create alternative African national ICT narratives and further discussing contributions made by the thesis as well as prospects for further research.

Chapter 2: Background and Context

2.1 Introduction

This chapter aims to contextualize the rhetoric contained in the ICT for development policies of the UNDP, USAID and Rwanda by broadly analysing each organisation's perception of development and the role of ICT in poverty reduction. The chapter also analyses the role of the UNDP and the USAID in the creation of Rwanda's PRSP which guides the creation of the country's national ICT policy.

2.2.1 The emergence of Global Governance

The UNDP and USAID are located within the global governance system hence the rhetoric contained in their ICT for development policies is best understood in the context of this system. Although there is no agreed definition of the concept of global governance, Dingwerth and Pattberg (2006) identify four key characteristics of global governance theory. Firstly, global governance recognizes the existence of plural actors who have diverse perceptions in global politics. Key actors of the global governance system include the UN system, International Finance Institutions (IFIs), international development agencies, governments, civil society, scientists, bilateral and multilateral donors, and private corporations (Dingwerth and Pattberg, 2006). Secondly, global governance conceives world politics as a multilevel system in which local, national, regional, and global political processes are interrelated. Thirdly, unlike the concept of international relations which is traditionally linked to power relations, the notion of global governance starts from the assumption that a wide variety of forms of governance exist next to each other and that a hierarchy among these various mechanisms is impossible to discern. Lastly, because of the decline in state influence over world politics in a global dispensation, advocates of global governance capture the emergence of new spheres of authority in world politics as independent of sovereign nation-states.

There are various versions of the emergence of the global governance system (see Biermann, Pattberg, Chan, and Mert, 2007). It is generally agreed that the rapid emergence of an Information and Technology (IT) driven global economy in the post-industrial era accompanied by increasing concerns about trans-boundary

problems of poverty and heterogenization necessitated the implementation of the global governance system(Our Global Neighborhood: Report of the Commission on Global Governance, 1995; Hokfirchner et al., 2007; Heeks, 2008; UN intellectual history project, 2009).

As stated in Chapter 1, widespread criticism of top-down approaches to development towards the end of the 20th Century necessitated the creation of the participatory approach to development (World Bank, Report 1990). This approach, also known in the international development sector as Sustainable Development, defines poverty as multi-dimensional and its reduction as requiring a broad social, economic and political approach (World Bank Report, 1990).

The United Nations (UN) has played a central role in promoting the Sustainable Development approach within the global governance sector since the launch of the programme in Brazil, Rio, in 1992 at the UN Conference on Environment and Development (UNCED). Following various UN conferences on sustainable development, all UN signatories agreed on key tenants of the Poverty Reduction Paradigm (PRP) resulting in the adoption of eight Millennium Development Goals (MDGs) for the eradication of poverty in 2001.

2.2.2 Global Governance and ICT for development

The perception of the role of ICTs in development originated from American economists such as Machlup (1962), Drucker (1968) and Bell (1973). These scholars predicted that in a post-industrial era, there will be a direct link between economic growth and ICTs. Perceiving a post-industrial era as an information age, these economists saw ICTs as central to development because of their ability to transmit information on a global scale.

Two developments took place in America that seemed to confirm the information age theory. Firstly, increased computer use in America in the mid 1960s resulted in the ICT sector making a significant contribution towards the country's Gross Domestic Product (GDP) (Crawford, 1983). Secondly, widespread use of the internet by the Clinton-Gore administration under the Global Information Infrastructure (GII) programme to provide information on basic services to all Americans resulted in greater access to quality education and employment opportunities by poor Americans

in the 1990s (Heeks, 2008). Based on the information age theory and American experience, the Clinton-Gore administration believed that countries that utilized ICTs for development would prosper thus the notion of ICT for development (ICT4D) was born (Crawford, 1983; Heeks, 2008).

The Clinton-Gore administration marketed the information society agenda to the Group of 8 (G8)[2] in Europe in 1995, resulting in global promotion of the concept and its adoption in Africa in 1996 (see Brussels Inter-ministerial Summit on the Information Society, 1995; and AISI framework 1996).

2.2. 3 Neo-liberalization and global governance

The global governance system contends that development needs to be based on "sound macro-economic principles" of neo-liberalization capable of causing economic growth and poverty reduction (World Bank, 1990). Neo-liberalism is based on the assumption that individual freedoms are guaranteed by the freedom of the market. Consequently, deregulation, privatization, and withdrawal of the state from many areas of social provision are key features of neo-liberalization (Harvey, 2005). The idea of individual freedom is embedded in the United States of America (USA) liberal tradition, and it came to the fore in global economics following the great depression which occurred in the 1930s (Harvey, 2005). Influenced by liberal thought, the G7[3] believed that individual freedoms were threatened not only by fascism, dictatorships, and communism, but by all forms of state intervention that substituted collective judgements for those of individuals' freedom to choose (Harvey, 2005). Consequently, the group spearheaded a shift from Keynesian economic approaches based on state intervention and embraced neoliberal approaches (Harvey, 2005). Internationally, a new world order based on neo-liberalization was constructed through the Bretton Woods agreements, and various institutions, such as the United Nations, the World Bank, the International Monetary Fund (IMF), and the Bank of International Settlements in Basle. This culminated in the articulation of what became

[2] The G8 was a very influential European political club comprising 8 super powers that emerged after the 1ST World War. These countries included; the USA, UK, Germany, Japan, France, Australia, Canada and Russia.

[3] Before Russia joined the G8, the influential European club was known as the G7.

known as the 'Washington Consensus' in the 1990s and the creation of a new world order (see Harvey, 2005).

Following the establishment of the new world order, leading International Financial Institutions (IFIs) such as the IMF and the World Bank began to stipulate since 1999 that developing countries must come up with Poverty Reduction Strategy Papers (PRSPs) based on liberalization approaches of privatization and free markets to qualify for aid.[4] The entire international development sector generally espouses a similar liberalization discourse believed to be the panacea to poverty (Escobar, 1995). The imperatives behind the liberalisation of the telecommunication sectors are also driven by theoretical arguments anchored in liberalism and the global information society regime can be seen as liberalization's emergent sub-structure (Chiumbu, 2008).

2.2.4 Knowledge production in International development agencies

Based on the participation paradigm, international development agencies claim that they rely on the principles of participation, empowerment and accountability to create development policies that are directly informed by poor people's perspectives (see Overview of UNDP Development policy, 1990; Overview of USAID Development policy (1990). Long (2001), however observes that the creation of development policy has remained a top-down approach involving generation of development knowledge from two main related sources (also see Escobar, 1995). Firstly, Long (2001) sees development knowledge guiding the creation of international bilateral and multilateral development policy as directly emanating from mother countries of international development agencies. According to Long (2001), knowledge influencing the creation of international development policies originates from the strong presence and lobbying activities pursued by the more powerful coalitions of the Unites States of America (USA) and European board members. Long sees these coalitions as representing country interests. He states that although country interests may be different here and there, these countries generally support a neo-liberal agenda hence they frequently convey a degree of consensus when it comes to more general goals

[4] See Stewart, F.; Wong, M. (2003) Do PRSPs empower poor countries and disempower the World Bank, or is it the other way round? Available at http:www.tanzaniagateway.org/docs/PRSPs, accessed 11 April 2011

and means of development (also see Powell, 2006; and Escobar, 1995). In this regard, USAID development policy can be seen as directly influenced by American interests while UNDP development policy can be seen as prone to power shifts in the neoliberal club largely reflecting dominant interests of stronger World powers (Long, 2001). Boas and McNeil (2001) concur with this view arguing that although the Executive Board of the UNDP is elected on the basis of one country one vote, it is difficult to imagine that the consensus that emerges from discussion is unrelated to each Board member's financial contribution both to the UN at large and the UNDP in particular.

Secondly, Long (2001) sees development knowledge as emanating from the expert domain. According to Long, development agencies depend on internal and external experts to come up with ideas for policies. He however contends that at the end of the day, it is not the rationality of the policies that markets the knowledge of development experts to development agencies. Long sees political factors such as the effectiveness of experts in persuasively transmitting and selling their knowledge products according to dominant neo-liberal perspectives, and the existence of the right political and commissioning networks as enabling them to get the necessary backing for their ideas. He explains that much depends on whether an expert can adjust his point of view and line of work to fit in with current dominant development discourse.

Boas and McNeil (2001) further observe that the creation of development ideas by development experts is composed of two parts. This involves drawing attention to a specific issue such as the environment or urban unemployment, and determining how such an issue is viewed, a process the scholars define as 'framing'. The scholars state that a successful framing exercise will both cause an issue to be seen by those who matter, and ensure that they see it in a specific way. In order to achieve this with minimum conflict or pressure, ideas are made to appear 'natural'. To be effective, framing must therefore make favoured ideas seem like common sense, and unfavoured ideas appear unthinkable (see Cox 1983:179). Based on the Gramscian theory of hegemony, Boas and Mcneil (2001) state that the framing of thought resulting in the controlling of action by international development experts enables mainstream development discourse to exercise hegemony in the international development arena (see Cox ,1983).

Long (2001) sees the economist perspective from which the neo-liberal discourse is derived, as dominating the creation of legitimate development ideas. As a result, economists, mathematicians and engineers tend to dominate the generation and validation of knowledge in development institutions (also see Kothari, 2006, Escobar, 1995). This way, Long argues that the assessment of implemented programmes and the production of new policies are kept within established expert domains in which senior advisors play a key role. Consequently, it has often been difficult for less well-connected groups with more open-ended and challenging agendas to make much headway. He states for instance that the American Chicago school, and the Institute of Development Studies (IDS) and other so called 'blue chip' development and research organizations have, through the close interpersonal networks of their senior staff, been able to reach out and influence policy making within multilateral circles such as the USAID and international bodies.

Boas and McNeill (2001) identify two types of power; relational and structural power, that are used to promote some ideas and specific interpretations of ideas. They define structural power as power over the order of things and the beliefs sustaining the order of things and relational power as the exercise of power through political networks. They further state that an actor can exercise both simultaneously and their use is dependent upon the interplay of material conditions, interests and ideas**.** This thinking is based on leading Gramscian scholar, Cox (1986)'s theory of "Framework For Action." According to Cox's theory, institutions that share a common picture of reality tend to exhibit words and actions that reproduce this reality (Cox, 1986). Cox concludes that a fit between institutions, ideas and material capabilities often creates ideological hegemony. In this regard, international development institutions sharing common interests can be seen as rallying behind a more or less similar development ideology which is then framed as "reality."

Although Cox (1986), Long (2001) and Boas and McNeill (2001) acknowledge the existence of voices of dissent from civic organisations, local development workers, NGOs, they argue that these are drowned by the persistence of an already entrenched group of experts and a well organised, behind the scenes manipulative lobby of powerful post-industrial countries. Long (2001) also states that some of the dissenting views or counter discourse are partially adopted to give a human face to development

but in the long run the same sets of interests guide the major policy shifts and the funding of development initiatives (also see Kothari, 2005). For Long, this explains why the combination of the neoliberal discourse of liberalisation and economic growth sits well with the apparently conflicting discourse of participation, empowerment and poverty reduction**.**

Based on above critiques of knowledge production in international development institutions, it appears as if the creation of development knowledge tends to be dominated by developed countries without much involvement of the targeted people in developing countries (Escobar, 1995). This tendency can promote top-down development tendencies in mainstream development strategies. The study therefore questions the extent to which the rhetoric in ICT for development policies of international development agencies promotes the involvement of poor people in development knowledge production processes.

2.2.5 Problematizing Global Governance and Poverty reduction

The study observes that the global governance system has inherent weaknesses, which render its poverty reduction discourse problematic. Post-development scholars criticize global governance for not addressing critical questions of power such as who defines the principles, norms and values of global integration, who makes decisions in global governance partnerships, and who benefits and loses (Escobar, 1995; Crush 1995). Escobar (1995) argues that the existence of power gaps in the global governance system enables international development agencies to use their economic supremacy to impose foreign notions of development on developing countries in the name of poverty reduction. For instance, he argues that global governance's construction of liberalization as a universal "common sense" approach to development and its insistence that developing countries must adopt liberalization principles in their overall development strategies in order to qualify for aid tends to impose neo-liberal development paradigms on developing countries thereby constraining their freedom to define development from local perspectives. This view is supported by Gramscian scholar Soerderberg (2006) who argues that the notion of globalization is deeply entrenched in neo-liberal thinking which seeks to co-opt and depoliticise radical movements in order to subdue alternative ideas.

Furthermore, post-development scholars argue that despite global governance's 'participation' rhetoric and its tendency to evoke development relationships based on 'partnership' the system is embedded in power inequalities traceable to capitalism (see Crush, 1995; Escobar 1995; Biccum, 2005). These scholars observe that the industrial revolution which occurred in Europe in the 19th Century led to increased demand for raw materials, markets and cheap labour by Western countries. The scholars argue that these economic demands gave impetus to the creation of a capitalistic neo-liberal strategy aiming to enable continued economic influence in developing countries after the colonial era. As a result post-development scholars argue that global governance's prescription of liberalization principles based on free trade without considering the influence of power in the participation of developing countries in open international trade is capable of perpetuating deep-seated power inequalities between developed and developing countries (Crush, 1995; Escobar 1995; Biccum, 2005). This view has been supported by neo-Gramscian scholars such as Harvey (2005) who argues that although neo-liberalization is based on ostensibly noble ideals of freedom, the freedoms it embodies reflect the interests of private property owners, businesses, multinational corporations, and financial capital, to private and unregulated exploitation. He states that very often these freedoms entail the right to repatriate profit from developing countries at the expense of indigenous inhabitants. He also argues that increasing social inequality has in fact been such a persistent feature of neo-liberalization as to be regarded as structural to the whole project. Harvey (2005) concludes that neo-liberalization was from the very beginning a project to achieve the restoration of class power.

Based on post-development critique of the neglect of the role of power in the global governance system, the study argues that the system's call for the use of ICTs to promote the global exchange of development information within a neo-liberal context can open up developing countries to one-way information flows from the West. This can result in ideological influence and continued socio- economic exploitation of developing countries by developed countries. Escobar (1995) argues that by recommending the use of the internet to take villages out of their isolation and place them into the global village, the ICT for development discourse thrusts villagers into the hegemony of Western knowledge and capitalism. Adams (1995) concurs that the

use of the internet to knock down virtual and physical barriers can result in the extension of Western domination to distance spaces.

The post-development view of global governance has been attacked by some as a futile attempt to escape the realities of globalization (Brigg, 2002). Citing the inherent complexities of global interaction which make it very difficult to ascribe power to a central sphere of influence, Brigg insists on a horizontal view of power relations in global politics as opposed to an asymmetrical perception.

Post-development critique of the global governance system as serving developed countries' interests has, however, been supported by a host of scholars in the anti-globalization movement such as Kirton (1999), Hodges (1999) and Baker (1998), who observe that the UN system (including UNDP), driving the global governance system has since its inception saved the neo-liberal interest of a few countries such as the G8. Similarly, Ayers (2006) observes that the American democratisation project championed by the USAID seeks to reproduce within Africa and elsewhere, the patterns of transformation that characterized the transition to capitalist modernity in north-west Europe.

Based on the above, the study therefore concurs with the post-development view of the existence of power inequalities within the global governance system. Since the international ICT for development rhetoric emanates from the global governance discourse, the research argues that the existence of power inequalities in the conceptualization of the global governance systems can promote top-down tendencies in the framing of the use of ICTs for development by international development agencies under the pretext that information flows to developing countries can lead to development. This can influence the formulation of African national ICT policies that are shaped by the UNDP and USAID ICT for development discourse, such as the Rwanda national ICT policy, in ways likely to negatively affect the participation of the poor in development processes (Chiumbu, 2008; Moodley, 2005). The next section examines the role of the UNDP in global governance, its perception of poverty reduction and involvement in the creation of the African and Rwandan ICT for development discourse.

2.3 Locating the UNDP in global governance

2.3.1 The Creation of the UNDP

Perceiving poverty as the main threat to global peace and security, the UN restructured its system and created a fully fledged poverty reduction agency in 1965 (see UN Reform: Restructuring for Global Governance, 1997). The United Nations General Assembly combined its Expanded Programme of Technical Assistance and the Special Fund to create a poverty reduction entity known as the United Nations Development Programme (UNDP) in 1965.[5] The UNDP's goal is to "promote inclusive and sustainable human development and work to reduce poverty in all its dimensions."[6] The organisation partners with governments, other international institutions and Civil Society Organisations (CSOs) in efforts to collectively promote the attainment of MDGs in developing countries. The UNDP currently partners with more than 139 developing countries, including 45 Sub-Saharan countries.[7]

2.3.2 Overview of UNDP development policy

Based on the global governance multi-dimensional perspective of development, the UNDP defines human development as, "a process of enlarging people's wide ranging choices to live a long and healthy life, to be educated and to have access to resources needed for a decent standard of living" (Overview of UNDP Human Development Report, 1990: 1). A similar broad view of development is expressed by a host of players in the international development community such as the USAID, SIDA, NORAD, DANIDA and DFID (see Salinger and Stryker, 2001).

The UNDP relies on a capacity-building strategy to reduce poverty in developing countries (Overview of UNDP Human Development Report, 1990). This involves directly strengthening the poor people's capacity to "connect with knowledge, experience and resources" required for sustainable human development, an approach referred to as "human development" (Siochrú, 2007: 1). The UNDP contends that its capacity building approach enables the poor to participate in the formulation of national development policy in ways that benefit them (Overview of UNDP Human Development Report, 1990). A key instrument of the UNDP capacity building

[5] Available at http://www. UNDP history. mtl p.6.
[6] Available at http://www.undp.org
[7] Also available at http://www.undp.org

programme is the Special Unit for Technical Cooperation among Developing Countries (SU/TCDC). The SU/TCDC aims to facilitate regional and inter-regional co-operation for information sharing and formulation of development policies. The assumption made by the UNDP capacity building approach that "connecting with knowledge" can cause poverty reduction is problematic. Seeing developing countries as having to "connect" with knowledge to develop tends to imply that development knowledge is located somewhere outside poor people's communities thereby perpetuating modernization linear communication models of development comprising knowledge senders and receivers.

Based on its capacity building approach, the UNDP perceives the widening gap between developed and developing countries in the areas of knowledge and technology as reflective of socio-economic and political inequalities between North and South (Overview of UNDP Human Development Report, 1990: 2). The organisation therefore sees bridging the technology and knowledge gap or "digital divide" as a means of enabling poor people to access global knowledge and information resulting in poverty reduction (Labella, 2005). Accordingly, UNDP Policy advisor, Raul Zambrano, states on his blog that the UNDP became the first UN agency to make strategic use of ICTs to promote sustainable human development in developing countries**.**[8]

2.3.3 UNDP and ICT for development in Africa

The UNDP's earliest large scale ICT for development initiative in developing countries was the Sustainable Development Networking Programme (SDNP), which was created in 1989[9]. Following the landmark UN Rio conference in 1992, the organisation realised that many countries, especially poorer ones, lacked a reliable information base to make effective decisions and promote sustainable development issues.[10] Thus the SDNP became an integral part of the UNDP capacity building programme known as Capacity 21, with the aim to facilitate access to information and encourage greater participation by all development actors. The organisation's earliest large scale ICT programme in developing countries was therefore conceived from a

[8] available at http.//www.undpegov.org/blog
[9] Ibid.
[10] Ibid.

top-down and information-centric view of development communication. The SDNP ran from 1992-2000 and assisted close to eighty developing countries, including African countries, to utilize ICT for sustainable development[11].

In most African countries, the SDNP represented the first encounter with ICTs at a national scale and earliest attempts to utilize ICTs for the attainment of comprehensive development goals.[12]For instance, the SDNP brought internet access for the first time to at least 40 developing countries and created the first web sites for many African public institutions, with the aim to make information accessible to the public.[13] The programme also tackled policy issues related to telecommunications and spent a large part of its resources in capacity building and training for the use of ICTs in the public sector and by civil society organizations. In Rwanda, the UNDP specifically helped to computerise the services of the country's Documentation and Information Division of the Ministry of Economy and Plan[14]. Zambrano states on his blog that in most countries, SDNPs influenced national ICT policies through their multi-stakeholder steering committees, which helped to strengthen capacity in what was then an emerging area in Africa.[15] One of these countries is Rwanda where the UNDP played an advisory role in the creation of the country's national ICT policy from 1998-2001[16].

2.3.4 The creation of the UNDP ICT strategy

The SDNP also made a significant contribution to global recognition of the UNDP as an expert in the formulation of national ICT for development strategies resulting in the creation of the UNDP and global ICT for development strategy, the Digital Opportunity Initiative (DOI).[17] Based on the UNDP's experience in the use of ICT for poverty reduction in Africa under the SDNP, the organization was regarded as the

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[11] available at http.//www.undpegov.org/blog

[12] Available at http://www.undpegov.org/sdnp/doc/whatis/backgrounder 98.html

[13] ibid

[14] Available at http://www.uneca.org/aisi/nici/countryprofile/rwanda/rwanpol.hmt

[15] available at http.//www.undpegov.org/blog

[16] rwanpap1.htm.

[17] available at http://www.undpegov.org/blog

"best representative of developing countries" in the implementation of ICT for development policies (see UNDP general ICT4D strategy). The UNDP was therefore tasked by the G8's Dot Force[18] in 2000 to deliver a global assessment of the extent and implications of new information technologies and the knowledge gap (see UNDP general ICT4D strategy). The agency then initiated a private-public partnership called the Global Digital Divide Initiative in 2001 in partnership with the Markel Foundation, Andersen Consulting, and the World Bank (UNDP general ICT4D strategy). By July 2001, the collaboration had submitted its final report to the Dot force entitled, *Creating a Development Dynamic; Final Report of the Digital Opportunity Initiative* commonly known as the DOI report. The DOI report (2001) became the Dot Force and UNDP's first ICT for development strategy for the use of ICTs in developing countries in support of poverty reduction and continues to be in used by the organisation up to date. Zambrano states on his blog that the DOI is based on the UNDP's SDNP experiences and key ICT for development perceptions guiding the DOI strategy emanate from the SDNP.[19] For instance, he states that central views such as the assertion that ICTs "are not an end in themselves but a means or enabler for development" and that "information becomes valuable only when activated within a specific dynamic" emanate from the SDNP[20] (also see DOI strategy, 2001: preamble).

Although the DOI strategy was created in July 2001, three months after the finalization of the Rwandan ICT strategy in March, 2001, the study relies on the DOI to analyze the influence of the UNDP ICT for development rhetoric on Rwanda because the DOI is the official UNDP ICT for development policy expressing the UNDP's perception of ICT for development based on the organisation's SDNP experience. The UNDP has used the DOI strategy to offer assistance to more than

[18] The DOT Force was created by the G8 at the Okinawa Summit in 2001 to address the problem of the digital gap between developed countries and developing countries known as the "digital divide." The taskforce had a broad membership comprising governments, the private sector, nonprofit organizations and international development organizations (See Stephen, G.(2006) G8 Institutions as a cause of compliance: The Dotforce Case. Available at http.//www.g8.utoronto.ca/scholar/stephens

[19] available at http://www.undpegov.org/blog

[20] ibid

thirty developing countries in the formulation of national ICT strategies including Mozambique, Malawi and South Africa (see UNDP General ICT strategy). It is against this background of the far reaching influence of the UNDP ICT for development discourse in Africa that the study perceives the examination of the UNDP ICT for development rhetoric and its influence on Rwanda as capable of shedding light on implications for the influence of international ICT discourse on African poverty reduction strategies. The study maintains that the UNDP ICT for development policy is most likely to be strongest in Rwanda because of the organisation's historical involvement in the creation of the country's development policy and Rwanda's earliest ICT sector which will be demonstrated later in this chapter. Extensive participation by the UNDP in the creation of Rwanda's ICT policy, which is addressed in Chapter 6, also enabled the UNDP to greatly influence the country's ICT for development rhetoric.

2.4 Locating the USAID in global governance

2.4.1 Historical background

The creation of the United States Aid agency (USAID) was motivated by a combination of American self-interest and moral obligation traceable to the Marshall Plan (1948).[21] Following the emergence of the United States of America (USA) as an industrial giant after the Second World War, USA Secretary of State, George Marshall, felt morally compelled to provide financial and technical assistance to European countries in order to create economic stability in the war-torn continent. From a self-interest perspective, the Marshal plan aimed to create markets in Europe for America's highly industrialized economy. Since then, American development policy has been influenced by the Marshal Plan's development formula involving capital and technological injection to achieve speedy take-off (Salinger and Stryker, 2001).

The goals of the Marshall plan shaped the creation of the USAID in 1961. From a self-interest perspective, the USAID was created to be a "muscular agency" capable of supporting American economic interests through the promotion of global peace.[22]

[21] Available at http://www.USAID history.mhtl:12
[22] ibid

The USA felt it had political obligations, "as a wise leader, good neighbour and the wealthiest people in a world of largely poor people," to counter communism perceived as the adversary of freedom and prosperity[23]. The USAID was therefore conceived as an integral part of American foreign policy.

The USAID's mandate is to promote long-term assistance for economic and social development in developing countries.[24] Since its formation, the USAID has provided aid to forty nine African countries in the areas of economic growth, security and humanitarian assistance. By 2010, USAID assistance to Africa stood at $6.4 billion making the agency the leading international development organization in the region[25].

2.4.2 Overview of USAID development policy

Like the UNDP development policy (1990), the USAID *Sustainable Development Strategy* (2000) represents a shift from its earlier perception of poverty as caused by lack of capital and technology and defines development from a broader perspective based on the global governance view. Based on global governance's participatory approach to development, the USAID contends that sustainable development is not something that donors do for developing countries; but it is something that donors help the people of developing countries do for themselves (USAID's strategy for sustainable development: an overview, 2000: 5).

The USAID partners with host governments to create country specific development strategies in close cooperation with local communities, and other donors (USAID's strategy for sustainable development, 2000). The agency maintains that the principles of participation, capacity building and empowerment guide the formulation of country development strategies to ensure that local communities define and own development policy. The USAID development strategy has six priority areas for poverty reduction namely; broad-based economic growth and agricultural development, democracy and good governance, building human capacity through education and training, stabilization of world population, environmental protection, and humanitarian assistance (USAID's strategy for sustainable development, 2000).

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[23] Available at http://www.USAID history.mhtl:12
[24] ibid
[25] ibid

Like the UNDP and most international development agencies, the USAID stipulates that in order to qualify for aid, developing countries must implement liberalization policies that allow free trade, foreign investment, support competitive markets and promote efficiency. Governments are also expected to put in place policies that promote democracy, human rights, gender equity and lawful governance (see USAID Sustainable development policy: an overview, 2000: 5-8).

To promote democracy, governments are encouraged to implement telecommunication policies that enable free access to ICTs and free flow of information in order to empower citizens to express themselves and participate in decision-making processes (see USAID Sustainable development policy: an overview, 2000: 8). Based on the American Information society agenda, the USAID development strategy also maintains that nations that harness ICTs can look forward to expanded economic growth, and improved human welfare. Consequently, the USAID development policy sees enabling more widespread participation and empowerment in the global information society as an important development result in its own right (see USAID Sustainable development policy: an overview, 2000: 8).

2.4.3 ICT and Agricultural development

Since most of the poor people in developing countries rely on agriculture for their livelihoods, the USAID maintains that the transformation of the agricultural sector is an essential aspect of broad-based economic growth (USAID Sustainable Development Policy: an overview, 2000: 8). The USAID sees the adoption of improved agricultural technologies and access to information as key to agricultural transformation in developing countries (USAID Sustainable Development Policy: an overview, 2000: 11). The agency therefore champions equitable access to ICTs to enhance the capacity of local people to access diversified information resulting in enhanced learning and increased productivity (USAID Sustainable Development Policy: an overview, 2000: 22). Access to ICTs in rural areas is also seen as capable of empowering rural farmers by providing them with information on global markets (USAID Sustainable Development Policy: an overview, 2000: 22). In the long run, the adoption of modern technologies is perceived as enabling a shift from subsistence

agriculture to producing for off-farm markets thereby creating additional employment opportunities for the poor. Ultimately, the USAID maintains that by focussing on "broad-based" economic growth, the agency can do a great deal to reduce poverty without having to target the poor explicitly (Crosswell, 2000).

Despite claiming a multi-dimensional view of poverty, it appears as if the USAID's development strategy portrays a predominantly economic and technological perception of development resting on the belief that the benefits of technology and national economic growth will trickle down to the poor (Salinger and Stryker, 2001). This view is problematic because it neglects complex political and socio-economic factors affecting the participation of the poor in technological development and national economic development processes (Crush, 1995).

2.4.4 The creation of the USAID ICT for development policy

As stated earlier, the ICT for development discourse originates in America hence the USAID has been at the forefront of efforts to create a global "information superhighway" capable of enabling all people of the world to enjoy the "information sharing benefits of ICTs."[26] In 1993, American Vice-President Al-Gore invited the private sector to work closely with international development agencies to set up internet connection as a development tool in Africa[27]. Gore perceived internet connection as a means of bridging the gap between the "information have and have-nots".[28] Former Vice President Gore's invitation resulted in American high-tech companies and non-profit organizations collaborating with the USAID to promote internet expansion in developing countries in 1994.[29]This collaboration was led by the USAID and known as the *Leland Initiative*, or the *African Gateway to the Global Information Infrastructure (GII)* project.[30] Like the UNDP's notion of capacity building, the USAID-led *Leland Initiative*'s concept of a "gateway" seems to have been founded on the problematic view that African people need a channel to connect them to technology and information that is located elsewhere (see Escobar, 1995).

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[26] http://www.clinton5.nara.gov

[27] http:en,Wikipedia.org/wiki/vicepresidency of Al Gore#Economy&information technology

[28] ibid

[29] http://www.clinton5.nara.gov

[30] ibid

The *Leland Initiative* was a five-year, US$15 million, interagency initiative initially designed to assist up to 20 African nations in connecting to the internet and other electronic technologies in order to promote economic growth. The programme later expanded its mandate to include assisting countries to come up with appropriate national telecommunication policies conducive for the attainment of national development goals (Bland et al, 1996). By 1996, the USAID Policy and Program Coordination Bureau had published a best practice policy paper based on the Leland Initiative entitled, "Leland Initiative: Africa Global Information Infrastructure Gateway Project; Best Practices for Policy Accommodation, Technology Transfer, and End-User Applications of the Internet in the Developing World" (Bland et al, 1996).This USAID ICT policy document is referred to in this study as the *Leland Initiative (1996)*. Some of the countries assisted by the USAID under the *Leland Initiative* to connect to the internet and formulate national ICT for development policies include Rwanda, Mali, Botswana, Cote d'Ivoire, Eritrea, Ethiopia, Ghana, Kenya, and South Africa (see US Trade and Investment Policy Towards Sub Saharan Africa and Implementation of the African Growth and Opportunity Act, 2001). In Rwanda, the Leland Initiative provided technical support to Rwanda's telecommunications operator RwandaTel for the establishment of private ISPs resulting in the country's first public sector internet experience in 1996.[31] The USAID was one of Rwanda's leading development partners at the time of the creation of the country's ICT for development strategy from 1998-2001, hence the influence of USAID ICT for development discourse in Africa, is perhaps most evident in Rwanda (Nyumiseva, 2002; Ansoms, 2007).

This chapter concludes by providing Rwanda's historical background and examining Rwanda's Poverty Reduction Strategy Paper (PRSP) as a basis for understanding the rhetoric within her national ICT strategy. In the process, the chapter also seeks to understand the role of the UNDP and USAID in the creation of Rwanda's development policy which informs the formulation of Rwanda's ICT policy.

[31] See http://www.uneca.org/aisi/nici/countryprofile/rwanda/rwanpol.hmt

2.5. Describing and problematizing Rwanda's Poverty reduction discourse

2.5.1 Historical Background

Although Rwanda's national ICT policy was created a year earlier than the country's PRSP, Rwanda's national ICT for development policy is informed by the country's poverty reduction perception, which is expressed in its PRSP (Dzidonou, 2002). As such, understanding Rwanda's PRSP helps to contextualize the analysis of the poverty reduction rhetoric in Rwanda's national ICT policy. A brief outline of Rwanda's historical background will help to contextualize the examination of Rwanda's PRSP.

Located in East Africa, Rwanda was colonized first by Germany, then Belgium from 1885 to 1961 (Chossudovsky, 2003). At independence in 1961, the Rwandan government inherited a country deeply divided on ethnic grounds due to long standing tribal conflict exacerbated by colonial rule (Chossudovsky, 2003). Consequently, Rwanda went through a period of political instability from 1994 to 2001. This period saw the occurrence of a mass genocide in 1994 and numerous ethnic insurgencies. According to Butcherd et al. (2006), up to one million people were killed in the genocide and three million fled into exile. The political instability caused increased poverty in a country facing economic crisis due to the global fall of coffee prices in the 1990s (Wangwe, 2002). As a result of the genocide, Rwanda experienced serious infrastructure destruction, livestock depletion, high HIV/AIDS prevalence, widespread child and women- headed households and psychological torture. By 2000, 64.1 per cent of Rwanda's population of approximately eight million lived below the poverty line (see Rwanda PRSP, 2002).

Agriculture is the backbone of Rwanda's economy and the country relies mainly on tea and coffee exports for its Gross Domestic Product (GDP). Rwanda, however, faces a number of challenges in its agricultural sector. Firstly, Rwanda has a rough terrain, soil erosion and serious climatic hazards, factors making farming very difficult and costly (IFAD, 2007). Secondly, Rwanda has a skewed land distribution pattern that tends to favour a few large scale commercial farmers who are seen as capable of producing high-value cash crops necessary for economic growth and national food security (Ansoms, 2007). Lastly, Rwanda has a high population growth rate, and the highest population density in Africa, of about 370 persons/km. This tends to put immense pressure on scarce agricultural land as 94 per cent of Rwandans live

in rural areas and depend on agriculture for a living (see The government of Rwanda: An Integrated Socio-economic and ICT Policy and Strategies for accelerated development, 2000). According to an IFAD (2011) report, out of Rwanda's large rural population, close to 14 per cent is landless and constitutes the most vulnerable population in the country. Consequently, poverty is concentrated in rural areas with 96 per cent of Rwanda's poor being peasants (Rwanda PRSP, 2002: 160).

It is against this background of widespread poverty that the Government of Rwanda (GOR) sought to rebuild the country in the aftermaths of the 1994 genocide. Since 1994, Rwanda's development has been driven by an influx of bilateral and multilateral donors who felt compelled to participate in the country's development for humanitarian reasons. By 2000, over 68 per cent of Rwanda's expenditure was donor-funded (Nsengiyumva, Habumuremyi and Haba, 2007). Some of Rwanda's key development partners include the USAID, UNDP, UNESCO, World Bank, IMF, DFID, Germany and Belgium (Chossudovsky and Galand, 2004). Because of a huge donor presence in Rwanda, the country provides a typical case study for understanding the influence of international development discourse on the formulation of African development policies (see Chossudovsky, 2003).

2.5.2 USAID and UNDP's involvement in Rwanda's development sector

The involvement of the UNDP and USAID in the creation of Rwanda's development policy can be traced back to the Structural Adjustment Programme (SAP) era. Like most African countries, Rwanda went through an ill-fated SAP from 1990-2000 aimed at resuscitating the country's economy (Chossudovsky, 2003). Although Rwanda's SAP was mainly funded by the IMF and the World Bank, several bilateral donors such as the USAID, UNDP , Belgium, Department of Foreign and International Development (DFID), International Labour Organisation (ILO), African Development Bank (ADB), and Food and Agriculture Organisation (FAO) co-funded Rwanda's SAP (Yumiseva, 2002).

As leading bilateral donors in Rwanda, the USAID and UNDP acted as policy advisors for the Government of Rwanda in the late 1980s, a role the agencies continued to play into the SAP and PRSP era (Dicker and Lent, 1992). For instance,

the USAID worked alongside the World Bank during Rwanda's SAP era to implement privatization policy reforms in key areas such as the financial, agricultural, commercial and industrial sectors, (see Dicker and Lent, 1992; Yumiseva, 1992; and Goldmark, 1987). The UNDP also provided technical expertise for the implementation of Rwanda's SAP in conjunction with the World Bank in a wide range of areas including; financial and monetary reforms, privatization of state-owned enterprises, civil service reforms, health, agriculture and environmental management (See, Rwanda Structural Adjustment Programme (Sap 11) Completion Report, 2007).

As stated in the global governance section, the SAPs era was succeeded by the Poverty Reduction Paradigm (PRP) in 2000 which required all developing countries' in need of financial aid to come up with a Poverty Reduction Strategy Papers (PRSP) (Ruckert, 2007). The process of formulating Rwanda's PRSP was co-ordinated by the Ministry of Finance and Economic Planning (MINECOFIN), under the leadership of the National Poverty Reduction Programme and the National Steering Committee of the PRSP development. The PRSP process involved wide participation by various sections of society such as the private sector, civil society, religious groups and donors (Rwanda PRSP, 2002: 10). Various international development agencies involved in Rwanda's development sector such as the UNDP, USAID, DFID and the World Bank provided technical and financial support for the assessment of living conditions in Rwanda from 2000 to 2001 (see The International Development Association and the International Monetary Fund, Rwanda, World Bank and IMF, 2002). These assessments contributed towards a poverty diagnosis for Rwanda's poverty reduction strategy.

Bugingo (2002) points out that the reliance of Rwanda's civil society on funding from external donors weakened Civil Society Organizations (CSOs) ability to represent poor community's interests as the interests of external donors and elites were often represented ahead of the poorest communities' interests. Based on this, and observations of the financial and technical role of the UNDP and USAID in the creation of Rwanda's development policy, the study argues that the UNDP and USAID are some of the key international development players that were able to influence Rwanda's perception of poverty reduction which laid the foundation for the

creation of Rwanda's ICT for development policy. The following section analyses Rwanda's poverty reduction perception.

2.5.3 Overview of Rwanda's PRSP

The purpose of Rwanda's Poverty Reduction Strategy (PRS) is to make poverty reduction a central policy objective across all government departments (Bugingo, 2002). Rwanda's poverty reduction strategies are condensed into the following five priority areas namely: rural development and agricultural transformation; human development; economic infrastructure development; governance; private sector development; and institutional capacity building (Rwanda PRSP, 2002).

The country's PRSP is based on the country's long-term vision, dubbed Vision 2020. The vision envisages the transformation of Rwanda into a middle-income country by 2020 (see Rwanda Vision 2020, foreword). Rwanda's PRSP closely echoes the international economic growth rhetoric stating that the acceleration of economic growth is key to poverty reduction and the achievement of vision 2020 (Rwanda PRSP, 2002: 9; Ansoms, 2007). Rwanda's PRSP maintains that poverty can be reduced rapidly within a growing economy by ensuring that the incomes of the poor grow faster than those of other groups. Because Rwanda's poor resides in the rural areas and depend on agriculture the country's strategy states that growing poor people's incomes entails investing in rural agricultural growth, and ensuring that the most disadvantaged groups are able to participate (Rwanda PRSP, 2002: 29).

Rwanda's PRSP advocates the transformation of the agricultural sector from its dependence on manual labour to widespread use of modern technologies capable of enhancing efficiency and productivity (Rwanda PRSP, 2002: 36). Increased agricultural productivity is perceived as capable of improving household incomes and creating rural farm and non-farm employment opportunities as demand for non-agricultural goods and services grow (Rwanda PRSP, 2002: 29-30). At a national level, increased agricultural productivity is regarded as critical for boosting Gross Domestic Product (GDP) and food security (Rwanda PRSP, 2002: 30-31). Rwanda aims to gradually reach a situation whereby fast agriculture-led growth will lead to a reduction of agriculture's share in GDP through the use of modern technologies to diversify Rwanda's exports (Rwanda PRSP, 2002: 30). (USAID Sustainable

Development Policy, 2000: 22). Rwanda's perception of agriculture development and economic growth seems to particularly resemble the USAID development rhetoric which sees the use of modern technologies as leading to enhanced efficiency and productivity resulting in increases in national GDP and poverty reduction.

Rwanda also perceives the development of national infrastructure such as roads, telecommunications infrastructure, water, and power, as enabling industrial growth especially rural industrial development (Rwanda PRSP, 2002: 54-57). According to Rwanda's PRSP, the development of a rural industry will result in poverty reduction through the creation of "non-farm" employment opportunities.

The country's development strategy champions human development as an important aspect of poverty reduction (Rwanda PRSP, 2002: 43-53). Formal education and vocational training is cited as necessary for the improvement of skills of a large population of unskilled Rwandans thereby enabling them to access employment in Rwanda and globally. This concept of human development seems to echo the UNDP capacity building rhetoric which perceives "human development" or the enhancement of people's skills as contributing towards poverty reduction.

Rwanda's PRSP concedes that its plan for economic growth is very ambitious given the country's limited resources; hence the country's policy recommends that the private sector should play a central role in Rwanda's development. Rwanda's President, Mr Kagame, emphasizes the centrality of the private sector in Rwanda's economic growth stating at the opening of a conference on Private Sector Development held in Rwanda on 14 March, 2012 that "There is no two ways about it: the private sector will drive Africa's economic growth and bring out the prosperity our people need and deserve."[32] Thus Kagame perceives the private sector as mandatory for development, and he primarily defines development in economic terms seeing economic growth as leading to poverty reduction. The private sector, especially the foreign owned private sector, is seen as a key contributor to infrastructure development necessary for economic growth (Rwanda PRSP, 2002: 35). To this extent, the country's PRSP recommends implementation of

[32] See http://sources. Worldbank.org, Speech by Paul Kagame on Private Sector Development in Rwanda on March 14, 2012

internationally acclaimed liberalization policies that can attract foreign investors such as the creation of a free and competitive business environment across all key sectors of the economy, the reduction of the costs and risks of doing business, and the promotion of exports (Rwanda PRSP, 2002: 35).

2.5.4 Conclusion

The chapter observes that despite the participation rhetoric, the global governance system tends to promote top-down development tendencies by neglecting power inequalities between developed and developing countries (Escobar, 1995). The UNDP and USAID tend to espouse similar top-down perceptions of development as involving knowledge and technology transfer to Africa. This has been illustrated by the analysis of their development policies, and premises for the creation of their ICT policies. Given the role of the UNDP and USAID as technical advisors in the creation of Rwanda's national ICT policy, the study argues that the organisations' top-down perception of development can result in the two international organizations exercising influence on the formulation of the poverty reduction discourse within Rwanda's national ICT policy. The study also observes that the UNDP and USAID were actively involved in the creation of Rwanda's PRSP. Since Rwanda's PRSP guides the country's national ICT policy, this chapter concludes that the influence of the UNDP and USAID poverty reduction rhetoric on Rwanda's PRSP points to the international development agencies' influence on the creation of Rwanda's e-strategy which will be illustrated in Chapter 6. The next chapter explains the theoretical framework guiding this study and provides literature review relevant to the study.

Chapter 3: Theoretical Framework and Literature Review

3.1 Introduction

As stated in Chapter 1, the study uses a post-development perspective to analyse the translation of the ICT for development rhetoric contained in development participatory communication theory into the UNDP and USAID's ICT for development policies. The study further examines the influence of the UNDP and USAID's ICT for development policies on the conceptualization of Rwanda's national ICT policy. The aim is to understand implications for certain portrayals of development on the participation of the poor in knowledge production processes. Consequently, the literature review is organised around four themes. To contextualize the critique of the ICT for development rhetoric found in development participatory communication theory, the literature review starts by examining the influence of earlier modernization models of development on development policy and participation paradigms. The second part analyses development participatory communication theory in order to understand how its discourse addresses the influence of power in participation contexts.

Section two of the literature review proceeds to examine development participatory communication theory's discourse for the use of ICT for development. Of central interest is analyzing the theory's portrayal of power dynamics influencing the participation of the poor in internet-based knowledge production processes. The third section of the literature review critiques the influence of the mainstream ICT for development discourse on African ICT for development paradigms to analyse potential implications for the influence of the approach on the conceptualization of African national ICT policies. The chapter concludes by explaining how the post-development framework can be utilized to question power and knowledge production in the framing of ICT for development paradigms.

Past studies show that despite the bottom-up rhetoric within ICT for development policies of international development agencies, the sector is highly influenced by top-down approaches to development (Yoon, 2003; Van der Velden, 2002; IFAD, 2003; Chiumbu, 2008; Moodley, 2005). Post-development studies have attributed the

perpetuation of top-down communication approaches in development participatory communication models to the paradigm's reliance on an empowerment approach that does not address power inequalities inherent in society (see Leeuwis, 2000; Huesca, 2000; Crush, 1995; Escobar, 1995; Mosse, 1998; Cooke and Kothari, 2001, and Kothari, 2006). The study argues that the influence of linear approaches to development on ICT for development paradigms can result in one-way communication approaches in "participatory" internet-based knowledge production paradigms.

Analysis of the ICT for development rhetoric contained in development participatory communication theory observes that the paradigm tends to disregard the role of power in development processes in four main ways. Firstly, the study finds that despite power inequalities influencing the use of ICTs, the theory portrays the internet as capable of facilitating mutual knowledge exchange resulting in a win-win development scenario (Hokfirchner et al. (2007), Van der Velden (2005), and Heeks (1999, 2008). Secondly, the research observes that the predominantly neo-liberal perception of the use of ICTs for development espoused in development participatory communications ignores the existence of economic and political inequalities between developed and developing countries which often make it very difficult for the later to benefit from globalization and free trade. In the same vein, the international aid rhetoric contained in development participatory communication theory neglects the existence of unequal power relations between donors and aid recipients in ways that can lead to ideological influence (Escobar, 1995). Thirdly, the framing of developing countries as having inherent information "needs" and the representation of knowledge as information tends to denigrate and disqualify the development knowledge of developing countries thereby legitimizing the dominance of Western technical information in the use of the internet for development. The study argues that lack of consideration for power in the conceptualizing of the theory, and the existence of knowledge production gaps coupled with the denigration of local knowledge by the ICT discourse in development participatory communication theory can promote the dominance of rich and powerful developed countries in the use of the internet for knowledge production resulting in the exclusion of poor people's knowledge in ICT-based knowledge production processes. This can promote the exclusion of ordinary people's knowledge in ICT for development policies of international development

agencies influenced by development participatory communication theory such as the UNDP and USAID.

Existing studies critiquing the influence of the international ICT for development discourse on the conceptualization of African national ICT discourse observes that emulation of the dominant ICT discourse in the creation of African ICT often resulted in the reproduction of a techno-centric, information-centric and economic perception of development that tends to ignore the role of power in development processes (Moodley, 2005; and Chiumbu, 2008). The review also finds that the use of ICTs for local knowledge production has not been prioritized in the analysis of African ICT for development paradigms (Heeks, 2008). Based on this, the literature review concludes that the neglect of power dynamics and local knowledge production in development participatory communication theory and in dominant ICT for development approaches can result in top-down approaches to development communication in African ICT for development strategies influenced by mainstream ICT for development rhetoric. This can lead to lack of prioritization of poor people's interests and the perpetuation of poverty in African poverty reduction strategies.

3.2.1 Historical overview of the development discourse

3.2.1.2 The dominant paradigm: Modernization

Development participatory communication theory is a component of the broad development discourse emanating from post-World War II notions of modernity hence its rhetoric cannot be analyzed in isolation. To contextualize the analysis of the ICT for development discourse within development participatory communication theory, the literature review therefore starts by briefly examining the discourse contained in early theories of development. As mentioned in chapter 1, the modernization paradigm was one of the earliest paradigms of development conceived after World War II. The paradigm has been called the dominant paradigm because of its pervasive impact on most aspects of development (Serveas, 2003). The theory equated development with the modernization of "underdeveloped" countries. According to the theory, "underdeveloped countries" needed to follow "developed" countries' models of industrialization and economic growth in order for them to be modernized (Lasswell, 1948). Accordingly, development was seen as the top-down

transfer of modern technology and values from "developed" countries to poor countries.

The top-down conception of development led to a parallel linear conception of the role of communication in development. Development communication was conceived as involving the use of the media to send development messages from "developed countries" to "under-developed" countries (Servaes, 2003). The media was therefore seen as playing a central role in development and regarded as having the power to rescue message recipients from their "ignorance" and "backwardness" resulting in the adoption of modern technology and western values (See Lasswell, 1948). The modernization conception of development therefore saw the emergence of a media-centric and sender-centric approach to development communication which has pervaded mainstream development communication policy up to date (See Waisbord, 2008; Quarry and Ramirez, 2008).

By the early 1970s, the modernization theory was losing popularity as critics denounced the approach for two main reasons. Firstly, the theory was dismissed for blaming under-developed countries for their status and ignoring external factors partly responsible for underdevelopment such as historical, social and political aspects (Servaes, 2003). Secondly, the paradigm was criticized for its top-down approach that viewed "under-developed" countries as passive recipients of development (Servaes, 2003). This approach was castigated for ignoring local knowledge, needs and aspirations (see Mefalopulos, 2008; Servaes, 2003). As a result, an opposing paradigm known as the dependency theory was conceived in the early 1970s.

3.2. 1.3 The Opposing Paradigm: Dependency Theory

Originating from Latin America, the dependency theory was deeply rooted in political-economy perspectives. One of its founding fathers Andre Gunder Frank (1969) saw the world as separated into two blocs: the core, composed of a few rich countries, and the periphery, composed of many poor countries (Servaes, 2003). According to the dependency perspective, core countries took advantage of their technological know-how, and economic power to dominate "under-developed" countries. The main role of the peripheral countries was restricted to that of supplying raw materials and cheap labour to the richer ones, making it impossible for them to

ever catch-up (Servaes, 2003). To address the problem, dependency advocates proposed a plan that worked on two levels. Nationally, poor countries on the periphery were to become economically self-reliant and less dependent on foreign imports. Internationally, they would form alliances among themselves to create a stronger political presence (Servaes, 2003). The ultimate goal would be to change the overall international set of relationships by forming a bloc of many countries with similar aspirations (Servaes, 2003).

Despite significant differences between modernization and dependency theories, the dependency theory found itself emulating modernization theory's linear models of communication. For instance, in order to reverse cultural domination by western imperialists, the answer for champions of dependency theory lay in tight state control of the media so as to effectively censor western influence. Servaes (2003) argues that state control of the media led to recasting of top-down communication models as the state churned out propaganda to masses who hardly had a say in their own development. Consequently, the dependency communication model was basically the same as the modernization approach: a one-way communication flow, with the main difference being who was controlling and sending the message and for what purpose (Servaes, 2003).

3.3The emergence of development participatory communication theory and its criticism

By the late 1970s, dependency and modernization theories had been dismissed as responsible for the failure of past development projects because of their disregard for people's culture (Mefalopulous, 2008). They were also seen as having a narrow perception of development because they tended to address economic aspects without catering for social and political aspects of development. To deal with these problems, the participation model was conceived. Unlike earlier theories that excluded local communities from contributing to development processes, participation theory is rooted in people's participation in development processes, taking cognizance of the cultural realities of indigenous people (Mefalopulous, 2008). In addition, the participation paradigm moves from economic definitions of development to include

other social and political dimensions such as education, health, and gender equality so as to ensure the attainment of broader development results.

Participation theories are based on the constructivist school of thought which argues that there can be different constructions of the same reality (Mefalopulous, 2008). In support of the participation discourse, development participatory communication scholars vie for a development model based on the convergence of diverse knowledge and perceptions to achieve sustainable development (see Chambers, 1997). The paradigm advocates a two-way communication platform where local communities, especially marginalized groups, are able to express their own knowledge and define development from their own perspectives. The paradigm seeks to reverse development learning processes by shifting the role of expert from the development professional to local communities who are perceived as the most knowledgeable about local issues (Chambers, 1992).

Participatory communication theory provides a communication framework based on dialogue and empowerment. Influenced by Habermas's (2006) notion of communicative action, the theory proposes that dialogue can be used to facilitate the balanced sharing of knowledge leading to the creation of new knowledge and the discovery of the best option for change (Jacobson and Storey, 2004; Mefalopulos, 2008; Quarry and Ramirez 2009). The paradigm advocates the creation of an ideal speech situation by ensuring a symmetrical distribution of opportunities to contribute to discussions and the use of honest persuasion by parties engaging in a dialogue (Jacobson and Storey, 2004; Mefalopulos, 2008). The "facilitator" must ensure that dialogue is used to enable the collective discovery of solutions that can respond to a development problem in a manner that fits the aspirations and abilities of the marginalized (Servaes, 2003, Mefalopulos (2008). Influenced by the Freirean concept of "empowerment" the theory also states that the empowerment of poor people can be achieved through the use of dialogue to build the capacity of the poor to engage in knowledge exchange, and decision making processes (see Freire, 1997.) Proponents of the theory concur that the prioritization of hitherto marginalized voices and selection of media and schedule that fit their needs is capable of reversing power imbalances by addressing a key dimension of poverty, social exclusion (Mefalopulos, 2008; Sen 1999; Chambers, 1997; Servaes, Jacobson and White, 1996).

The major criticism levelled against development participatory communication theory is its idealistic approach to addressing power struggles found in society (Huesca, 2000; Parfitt, 2004; Leeuwis, 2000; Kothari, 2006; Cornwall and Brock, 2006; Mosse, 1994; Kapoor, 2005; Cooke and Kothari, 2001 and Van derVelden, 2006). Leeuwis (2000) has criticized the theory for its reliance on dialogue and empowerment for the creation of a conducive environment for knowledge sharing. Leeuwis (2000) argues that dialogue as a tool for empowerment is too simplistic to address socio-economic challenges faced by the poor in participatory contexts. He states that the poor lack, among other resources, expert scientific knowledge and access to socio-economic resources, which they can use to make and criticise certain validity claims concerning truth, normative rightness and authenticity, hence they often find it very difficult to influence knowledge production processes. This view has been supported by empirical evidence from studies of participatory development approaches by various scholars such as Mosse, 1994; Frischmuth, 1997; Hagmann et al. ,1997; Pelletier et al., 2003). Although the cited studies are situated in very different social contexts, they all discover that power influences forms and patterns of participation leading to an apparent consensus and narrowing of perspectives as powerful voices tend to overshadow the weak (Pelletier et al, 2003).

In probably one of the most critical books of development participatory communication theory, scholars of post development theory, Cooke and Kothari (2001) concur with Leeuwis' (2000) view of the paradigm as neglecting power dynamics influencing participation processes. Cooke and Kothari (2001) describe participation as the 'new tyranny' of the development discourse because of its tendency to reinforce the exclusion of the poor and other socially marginalized groups instead of opening up channels for their voice. The authors identify three types of tyranny embedded within the participation discourse. Firstly, the authors see tyrannical tendencies in participatory decision making processes. Based on numerous case studies by participation practitioners and academics, the authors observe that development participatory communication theory's a-political representation of power promotes the dominance of multinational agencies and funders in participatory decision-making processes resulting in the manipulation of local knowledge (see Mosse, Francis, Hailey and Mohan in Cooke and Kothari, 2001). Project-based

illustrations by Mosse show that far from determining planning processes and outcomes, 'local knowledge' is often structured by expert planning processes (see Mosse in Cooke and Kothari, 2001). Consequently, Cooke and Kothari (2001) argue that participation ideals are often operationally constrained by institutional contexts that prioritize formal bureaucratic goals resulting in external interests influencing local locations.

Secondly, Cooke and Kothari (2001) identify a group level tyranny. They accuse the participation paradigm of neglecting well-known social and psychological dynamics of group functioning. As a result, they argue that the neglect of group dynamics often results in the expression of a consensus that reinforces the interests of the already powerful members of the group at the expense of the marginalized. Based on a research on forest management by Hildyard, Hegde, Wolvekamp, and Reddy, the authors demonstrate that participation can result in further marginalization of already disadvantaged groups because of failure to take into account the relative bargaining power of the poor (see Hildyard, Hegde, Wolvekamp, and Reddy in Cooke and Kothari, 2001). The authors conclude that this pitfall in participation discourse can result in participation providing opportunities to the more powerful.

Lastly, Cooke and Kothari (2001) view participatory methodology as tyrannical. They note that the overwhelming acceptance of the goals and values of participation has obscured consideration of other methods for cultivating development. They perceive the development participatory discourse as methodologically parochial because of its potential to alienate other development methods which have advantages that participation cannot provide (Christens & Speer, 2006.) Cooke and Kothari (2001) further argue that the notion of participatory methods as capable of causing 'empowerment' of local communities is narrow because it does not address the important question of, 'empowerment for what?' Based on the work of Henkel and Rodiridi, Cooke and Kothari (2001) argue that participation approaches tend to shape individual identities and 'empower' participants to take part in the modern sector of developing societies (see Henkel and Rodiridi in Cooke and Kothari, 2001). This kind of 'empowerment,' according to Cooke and Kothari, can be seen as tantamount to subjection because of its resemblance to modernization theory's view of development as change of local attitudes and behaviour.

Some champions of development participatory communication theory have responded to criticism of the paradigm by generally blaming the development context in which participatory development paradigms are applied. Quarry and Ramirez (2009) and Waisbord (2008) argue that the domination of the development sector by technical professions such as engineering, health and economics has led to a situation whereby technical experts impose top-down development communication goals on the communication department. As a result, the authors observe that the real purpose of participatory communication tools is lost as two-way communication is sidelined in favour of linear communication (Quarry and Ramirez, 2009; Waisbord, 2008). This view is disputed by post-development critiques of the development discourse such as Escobar (1995) and Khothari (2005) who contend that the relatively poor theoretical rootedness of participatory communication theory enables it to be easily co-opted into mainstream development discourse as a tool for legitimizing linear development interventions.

Other advocates of development participatory communication theory have acknowledged the existence of power limitations within development participatory discourse and responded to criticism of the paradigm by proposing various improvements to the theory. In their book entitled *"Participation: From Tyranny to Transformation?"* Hickey and Mohan (2004) respond to criticisms made by Cooke and Kothari (2001) by suggesting three themes that participation needs to consider in order to re-establish itself as a transformative approach to development. The themes are transformation, the temporal and the spatial, and representation.

Responding to criticism of the theory's incapacity to address power dynamics influencing participatory decision-making processes, Hickey and Mohan (2004) postulate that the participatory paradigm can strengthen the bargaining position of poor people in decision making processes by embracing broader moves for political change resulting in transformation. The authors state that participation needs to understand the meanings and levels of transformation. While most populist participatory approaches tend to stress local transformation, Hickey and Mohan (2004) argue that in order to strengthen the bargaining power of the poor within participatory relations, participation needs to go beyond the local and the individual and involve multi-scaled strategies that are operationalized at all levels including

individual, structural and institutional. According to Hickey and Mohan (2004), this can result in the creation of a radical development project capable of opening up spaces for manoeuvre within local power relations and enable the poor to hold patrons to account. Based on Habermas' (2006) notion of communicative action, Hickey and Mohan (2004) call for an active view of 'citizenship' related to decision-making at the community level and engaging with citizenship in multiple political communes including the state. They stress that the requisite structural conditions for the transformative participatory process include a state that is responsive to its citizenry (Christens and Speer, 2006).

In order for participation to achieve broad transformation, Hickey and Mohan (2004) further suggest that the paradigm needs to understand the temporal and spatial dynamics of participation. They state that a good understating of social political dynamics and their relations to other scales of governance requires a historical analysis of how institutions and agencies evolved over time. Such an approach can create a theory that is attuned to overlapping and unfolding political processes and spaces of power capable of influencing participation positively (Christens and Speer, 2006; also see Cornwall in Hickey and Mohan, 2004). Related to understanding historical dynamics of participatory contexts, the authors suggest that clear appreciation of participatory spaces is critical for achieving transformation. Based on studies by Mohan, the authors argue that seemingly contrived spaces can still hold the potential for the marginalized to constitute and manipulate project discourse as well as manage local their relations with donors (see Mohan in Hickey and Mohan, 2004). Furthermore, the authors propose that participation should desist from seeing communities as homogenous settings and see them as contested entities. Such a stance is seen as capable of dealing with group dynamics influencing participation and at the same time allowing political learning across different and new spaces.

Lastly, Hickey and Mohan (2004) propose that in order for participatory development to function as a vehicle for the achievement of sustainable decision-making power for the poor, the paradigm must develop a more adequate theory of representation. This entails a view of participation as a citizen right as well as coming up with alternative ways in which popular agency is legitimately conferred to higher level agents (Hickey and Mohan, 2004). Such an approach would enable the paradigm to fit into broader,

multidimensional processes of democratization and the achievement of functional citizenship (Christens and Speer, 2006; and see Gaventa and Brown in Hickey and Mohan, 2004).

While this study acknowledges on-going theoretical adjustments to development participatory theory, it critically examines the participation paradigm from a post-development perspective. A post-development perspective questions deep-seated expressions of power as well as the motive behind the development discourse. The perspective contends that as long as efforts in improving development theory are products of the same world view which has produced the mainstream concept of development, the development discourse is likely to remain a top-down affair and unchanged (Escobar, 1995). In his critique of the evolution of development theory, Pieterse (2010) states that unless the idea of participation is radically turned around so that international institutions would be considered as participating in people's local development, the participation model will remain paternalistic (Pieterse, 2010: 99). From a post-development position, the study finds the discourse within participatory development theory questionable because of its neglect of deep-seated power dynamics influencing participatory development contexts. In the next section, the study examines development participatory communication theory's discourse for the use of ICTs for development. The study is interested in critiquing the theory's portrayal of power dynamics influencing the participation of the poor in internet-based knowledge production processes.

3.4 The Role of ICTs in development participatory communication theory

As stated in Chapter 1, by the end of the 20th Century, development participatory communication theory began to focus on the use of ICTs as tools for effective participation and poverty reduction (Quarry and Ramirez, 2009). Because of their interactive nature and global reach, development participatory communication theory considers ICTs, especially the internet, as having the highest capacity to facilitate global knowledge sharing (Harris, 2004). As such, the paradigm describes ICTs as "enablers" or "tools" within the broad context of the social and communication environment (see Yves, 2010; Servaes, 2006).

Advocates of development participatory communication theory believe that although ICTs should not be seen as a panacea to poverty, the internet can contribute towards poverty reduction in various ways. First and foremost, participation scholars recommend that the internet must focus on providing relevant local content in local languages addressing poor people's basic needs such as health, education, and economic needs (Quarry and Ramirez, 2009, Yves, 2010; Servaes, 2006). According to Servaes (2006) and Yves (2010), use of the internet in key public and private sectors can contribute to development by improving efficiency leading to improved access to basic services and a variety of commercial products at an affordable price (Servaes, 2006, Yves, 2010). The scholars also generally believe that use of the internet to provide access to expert information to farmers situated in remote areas can enhance efficiency and productivity resulting in food security and development. On a global scale, champions of development participatory communication theory believe that access to the internet by the poor can enable them to access global economic opportunities such as competitive markets and employment opportunities (Serveas, 2006). Advocates of the model concur that a pro-poor approach to ICT for development can help to bridge the digital divide between rich and poor countries (Servaes, 2006). The participatory paradigm defines the digital divide as more of a social, economic, cultural and political divide (Gamucio Dagron, 2003, Yves; 2010). This is in sharp contrast to dominant ICT for development approaches that perceive the digital divide as the gap between the information rich and the information poor, a view emanating from modernization theories of development that see the poor as ignorant (Heeks, 2009).

Development participatory communication theory advocates empowerment of the poor through ownership and control of the internet. According to the theory, this entails free and open access to the internet by the poor in order to enable them to produce local content and share their diverse indigenous knowledge and define development from their own perspectives (Quarry and Ramirez 2009; IFAD, 2003). Ultimately, the paradigm states that local communities must define and control the design and implementation of ICT for development projects. To achieve local control, the paradigm underscores universal access to ICTs and enhancement of technical capacities of local communities. Advocates of the paradigm recommend implementation of neo-liberal policies based on privatization and free competition to

attract foreign investors capable of financing the development of telecommunications infrastructure in developing countries leading to universal access to ICTs (see Servaes, 2006; Yves, 2010).

Because developing countries are seen as lagging behind in the ICT sector, international development agencies are seen as best placed to offer technical support to developing countries in the implementation of national ICT policies to prioritize the application of ICTs to the MDGs (see United Nations ICT4D Task Force, 2003). Advocates of participatory communication however propose that apart from offering technical and financial aid, international development agencies must allow each African country to independently use a broad participatory process to formulate home grown ICT for development policies that promote equitable public participation in the information society as both producers and consumers of information and knowledge (Servaes, 2006). Consequently, ICTs are generally perceived as providing a free and equal platform for participation by all development actors. This view is questionable given power inequalities inherent in international development scenarios and society which make it very difficult for development actors, especially the poor, to participate equally in development processes.

3.4.1 Critique of development participatory communication theory's rhetoric for the use of ICTs for development

The major criticism levelled against the ICT for development discourse contained in development participatory communication theory is its neglect of power dynamics affecting the use of ICTs for the production of development knowledge (see Heeks, 2008; Hokfirchner et al., 2007; Van der Velden, 2006; Chiumbu, 2008; Moodley, 2005). Firstly, Van der Velden (2006) argues that the assumption that the interactive use of the internet can result in mutual knowledge exchange and a win-win development scenario is problematic. For Van der Velden (2006) this assumption rests on the belief that the use of ICTs for development takes place under circumstances of equality where development stakeholders have similar opportunities for expression and decision making. On the contrary, landmark studies on ICTs and society by Hokfirchner et al. (2007) have discovered that ICTs are embedded in a society characterized by social struggles, power, resource control, exploitation, and domination. Hokfirchner et al. (2007) argue that ultimately ICTs find themselves

facing questions of ownership and resource control which are features of society**.** As such, Hokfirchner et al. (2007) and Van der Velden (2002) recommend that ICT for development should be designed on the basis of fundamental values of justice and equality capable of challenging structures of domination and exploitation.

Champions of development participatory communication theory attempt to address the power debate by advocating the empowerment of local communities through local ownership of ICTs and the use of local languages (Servaes, 2006; Quarry and Ramirez, 2008). In view of power challenges affecting participation processes in general and the use of ICTs in particular, the study concurs that the empowerment approach cannot guarantee the poor people's participation in internet-based knowledge production processes.

Secondly, critiques also observe that although development participatory communication theory claims that ICTs must be used for the attainment of broad socio-economic development goals, its rhetoric stresses the use of ICTs for global economic integration (Moodley, 2005). Dominant participatory ICT for development literature is awash with "success stories" glorifying the use of ICTs to disseminate information in remote areas leading to the poor discovering hitherto unforeseen global markets (Moodley, 2005, also see Servaes, 2006; Mefalopulous, 2008; and Unwin, 2009c). This tends to portray an economic perception of the use of ICT for development based on liberalization principles of globalization and free trade. Such a view neglects the social and political role of ICTs in development such as their use to enable the participation of poor communities in development resulting in social transformation (Dagron, 2003). Furthermore, based on post-development critique of liberalization as promoting power inequalities between developed and developing countries, development participatory communication theory's promotion of the use of ICTs for economic global integration can be seen as a vehicle for extending Western economic and ideological hegemony (see Escobar, 1995).

The above criticism of neo-liberal approaches to development by post-development scholars has been attacked for ignoring the fact that neo-liberal policies have generally led to efficiency in otherwise collapsing public institutions resulting in social gains such as quality education, higher rates of literacy, better health and

employment opportunities (Brigg, 2000; Ziai, 2004). Brigg (2000) generally defends the implementation of liberalization approaches to development in developing countries since the 1990s as responsible for causing rapid economic growth in many developing countries.

While there may be improvements in human life brought about by liberalization policies, post development scholars such as Escobar (1995) and Mathews (2004) castigate liberalization for causing economic growth that only benefits a few elites and perpetuate inequality in developing countries. A recent publication by the United Nations Development Programme's Human Development Index on Sustainability and Equity (2011) supports this view pointing out that despite records of national economic growth surpassing 5 percent in most African countries over the past decade, Africa has become the most unequal continent in the world. Scott and Hersh (2001) observe that while there are many social, political and economic factors that contribute to poverty, evidence shows that unregulated capital and trade flows contribute to rising inequality and impede progress in poverty reduction. Based on this evidence backing the post-development view of neoliberal policies, the study concurs that the promotion of global economic integration as a panacea to poverty by ICT for development rhetoric in development participatory communication theory can perpetuate the gap between developed and developing countries resulting in economic and ideological domination.

Thirdly, by recommending that international development agencies should provide neutral technical aid in the implementation of ICT for development in developing countries, development participatory communication theory has been criticised for overlooking power inequalities between development experts and aid-recipients (Escobar, 1995). The post-development view disputes the theory's assumption that international development agencies can provide neutral technical and financial aid for the development of an ICT for development sector in developing countries (Kothari, 2005; Escobar, 1995; and Crush, 1995). Post-development scholars argue that the transfer of technical and financial aid in development processes often places the development professional on a very influential position of "expert" enabling his ideology to dominate development policy. The finding by Chiumbu (2008) that the international development community was able to exert ideological influence on the

framing of the African regional ICT for development policy, AISI, through financial and technical intervention lends weight to the post-development position.

Besides querying power relations between technical experts and aid-recipients, the post development theory has queried the motive for technical transfer by the development discourse. Post-development scholars argue that the notion of the "technical expert" rests on modernization theory's assumption that developed countries have superior technical knowledge and therefore best placed to rescue developing countries from their technical deficiencies (Escobar, 1995, Crush 1995). The study observes that development participatory communication theory appears to evoke a rescuing mentality in its recommendation for the use of ICTs to "unshackle people from their prison of poverty" (see Servaes, 2006: 25). The image of the poor as prisoners in need of rescuing portrays the poor as dependent and in need of technical intervention.

Consistent with a rescuing mentality, the theory prescribes universal access to ICTs and "relevant" information, "to meet the poor people's needs" (Servaes, 2006: 5; Unwin, 2009; and Hamel, 2010). In this regard, participatory communication theory seems to consistently perceive the poor in terms of information deficiencies while representing developed countries as information rich. Similar perceptions are echoed by international development agencies such as the World Bank and the Canadian International Development Agency (CIDA) often making reference to "information poverty," the "information poor" and the "information have-nots" as opposed to the "information rich" (see World Bank Development Report, 1998/99; and CIDA's Strategy on Knowledge for Development through Information and Communication Technologies (ICT) (date of publication unknown: 5). Furthermore, development participatory communication theory does not elaborate on what constitutes "relevant" development information or state its source. This tends to imply that such knowledge emanates from developing countries represented as "information rich." Such binary representations of developed countries as information rich and developing countries as information poor tend to denigrate local development perceptions and further legitimise one-way transfer of information from developed to developing countries (Escobar, 1995, Biccum, 2005).

Lastly, critiques have accused development participatory communication theory's ICT for development rhetoric of espousing a narrow perception of knowledge that treats knowledge as information. Van der Velden (2002) observes that development participatory communication theory perceives knowledge as a commodity that can be remotely exchanged via the internet leading to rational argumentation and innovation. Van der Velden, however, maintains that tacit knowledge contains the values, culture and experience of the knower therefore it cannot always be packaged as information for dissemination using the internet. The theory's narrow perception of knowledge can favour western scientific logic that can be easily disseminated as information at the expense of complex indigenous knowledge production methods (Mosse, 1994; Kothari, 2006). This can lead to the imposition of foreign knowledge in developing countries making it difficult for local communities' knowledge to count in ICT-based knowledge production processes. Without ruling out the role of ICTs in development, Van der Velden (2002) observes that knowledge is at best shared through practice. She suggests the reconfiguration of internet-based participatory models to promote diverse knowledge production. She recommends a participatory approach that involves the designing and application of ICTs as "knower- centred" tools capable of supporting online communities of practice, comparing data, information and knowledge, developing alternative scenarios, and helping people to present their information and knowledge in appropriate and effective ways (Van der Velden, 2002).

On the basis of the above noted power gaps observed in the empowerment, liberalization and international aid rhetoric contained in development participatory communication theory, the study argues that lack of consideration for power in the conceptualizing of the theory can cause the exclusion of local knowledge in ICT-based knowledge production processes as those with economic and political power dominate the use of the internet for knowledge production. The framing of developing countries as having information "needs" and the representation of knowledge as information also tends to denigrate and disqualify local development knowledge and promote the dominance of Western technical and economic information in the use of the internet for development.

The review of the portrayal of power dynamics influencing the participation of poor people in internet based knowledge production processes by development participatory communication theory therefore concludes that the existence of power and knowledge production gaps as well as the denigration of local knowledge in the conceptualization of development participatory communication theory is likely to affect the conceptualization of ICT for development strategies of international development agencies based on the paradigm such as the UNDP and the USAID. This can in turn adversely affect the conceptualization of African national ICT for development policies such as the Rwandan policy influenced by the UNDP and the USAID. The literature review now critiques the influence of the mainstream ICT for development discourse on African ICT for development paradigms to analyse potential implications for the influence of international ICT for development approaches on the conceptualization of African national ICT policies.

3.5 Analysing the influence of mainstream ICT for development discourse on African ICT paradigms

Despite the above noted weaknesses of the ICT for development rhetoric found in development participatory communication theory, there is very little literature critiquing the influence of the mainstream ICT for development discourse on the conceptualization of African ICT for development approaches. Influenced by early ICT for development critics originating from the economics discipline such as Machlup (1962, 1980), Porat and Rubin (1977), Bell (1973) and Drucker (1969), most studies of African ICT paradigms tend to take an evaluation approach. This often entails assessing access to ICTs and information as indications of development (see ECA Scan- ICT, Castells; 1996, ITU; 2008, Wilson and Young, 2008; Lewis, 2005; Dzidonou, 2002). For instance, studies by Wilson and Young (2006) and Lewis (2005) analyse power struggles affecting internet spread in the formulation of African national ICT policies such as the Rwandan and South African policies. In a study of the evaluation methods used by the Economic Commission of Africa's (ECA) SCAN ICT project responsible for evaluating the implementation of ICT for development in Africa, Kivunike (2007) finds out that a typical assessment exercise focuses on measuring access variables such as technological spread, affordability, adoption and use, without considering the contribution that ICTs make towards social transformation.

By the end of the 20th Century, critical scholars of development started to question the appropriateness of the ICT, poverty reduction and development approach to the needs of developing countries. The work of Amartyr Sen (1999) has influenced most of the critical studies of ICT for development. Some of the most notable critiques of ICT for development that have been influenced by Sen include Granham (1997), Mansell (2009), Hamel (2010), Moodley (2005), and Dagron (2003). Influenced by Sen's argument that development should enhance the capabilities and freedoms of the poor to make choices that contribute to their well-being, these scholars began to question the contribution of ICTs to the enhancement of poor people's capabilities.

The above stated critical scholars have castigated the dominant ICT for development paradigm for providing a universal solution to poverty based on Western neo-liberal beliefs of technology, information and economic growth as agents of development (Moodley, 2005; Van der Velden 2002). The scholars argue that Eurocentric approaches to development may not necessarily be relevant to African countries which often face unique and deep seated socio-economic inequalities that make it very difficult for the poor to participate in mainstream development processes (Moodley, 2005). These scholars concur that the contribution of ICTs to development should be assessed through their impact on the capabilities and functionings of the poor rather than their mere diffusion.

Following the above revelations of the neglect of poor people's perspectives in current ICT for development approaches, the research seeks to specifically examine how the framing of ICT for development by development participatory communication theory, international development agencies and African countries portray the participation of the poor in internet-based knowledge production processes. Heeks (2008) and Van der Velden (2002) acknowledge the existence of a knowledge production gap in ICT for development literature pointing out that after decades of network building, knowledge sharing and creation remains a central challenge for ICT for development. The study therefore contributes to the existing knowledge production gap.

The research relies on a discourse analysis approach to examine the rhetoric contained in ICT for development policies of international development agencies and Rwanda's national ICT policy. Unlike an evaluation approach, a discourse analysis approach enables the study to closely examine the use of language in development policies. There are very few studies that have used a discourse analysis approach to examine the ICT and poverty reduction rhetoric. Some of the scholars that have used a discourse analysis approach are Chiumbu (2008) and Moodley (2005).

Chiumbu (2008) uses a discourse analysis approach to examine the influence of external actors in the formulation of the African regional ICT policy, the AISI framework. Her study states that the implications of foreign ideological influence on African ICT policies includes lack of ownership of national ICT policies by African governments, tensions between interests of donors and government and creation of policies that are often out of tune with African country's realities. Chiumbu's study clearly indicates that power dynamics affect participation processes at regional level, with serious repercussions on national policy. In light of these findings, the study seeks to examine the influence of the UNDP and the USAID on the formulation of Rwanda's National ICT policy. Finally, the question of implications of the influence of the participatory discourse on Rwanda's ICT strategy will be raised.

While Chiumbu (2008) focuses on the influence of external actors on the framing of the African ICT discourse, Moodley (2005) employs a discourse analysis approach to analyse the ICT, poverty and development discourse contained in the national ICT policy of South Africa. The scholar questions the borrowing of the "digital divide" concept by the South African ICT policy from the international ICT for development discourse. According to Moodley (2005), argues that the adoption of the dominant "digital divide" discourse by the South African national ICT policy encourages a view of the poor people's problem as "information poverty" as a result of the digital (ICT infrastructure) poverty. He argues that this position can obstruct the South African government from considering the real needs and wishes of the community resulting in irrelevant state intervention. Moodley's study further argues that by representing the "other" as ignorant, the digital divide concept can render African knowledge illegitimate in ICT-based development communication processes.

Similar to Moodley's thesis, this research is also interested in tracing the influence of international ICT and poverty reduction discourse on the conceptualization of an African country's national ICT policy and analyse implications on African poverty reduction strategies. Despite this similarity the study is different from Moodley's research in a number of ways. Firstly, while Moodley broadly examines the poverty reduction rhetoric in South Africa's ICT for development strategy, this research specifically focuses on analyzing the rhetoric for the use of the internet in development participatory communication paradigms. The study focuses on exploring the discourse for the use of the internet for development because of the perceived prominent role played by the internet in the production of global knowledge for development (Hokfirchner et al., 2007). Secondly, while Moodley examines South Africa's national ICT policy, as mentioned in the rationale, this study has selected to study Rwanda's policy because it is widely regarded as one of the best models in Africa and other African countries have been encouraged to emulate it (Wilson and Young, 2006; Dzidonou 2002). Examination of Rwanda's strategy is therefore likely to offer a typical expose of African ICT for development rhetoric and poverty reduction. Thus insights from the study can point to possible implications for the influence of the international ICT for development discourse on other African countries that emulate the Rwandan strategy.

Lastly, the theoretical framework guiding Moodley's study mainly draws from Foucault's (1980) knowledge and power nexus along with Sen's (1999) capabilities approach and is only partially influenced by the post-development perspective. This study fully utilizes a post-development perspective to critically question participatory ICT for development paradigms.

3.6 Post-development theory overview

Post development theory is situated in the broad field of critical social theory. Critical theory can be partly traced to the influence of the Frankfurt school and Jürgen Habermas. These scholars assert that social theory should be oriented towards critiquing and changing society, in contrast to traditional theory oriented solely to understanding or explaining it (Wodak and Meyer, 2009). Some versions of critical theory include dialectical materialism, class analysis and post- structuralism (Mwanje, 2001). Post-development theory specifically emerged from a poststructuralist

intellectual tradition brought to the fore by Edward Said's 1978 classic study of *Orientalism* (see Said, 1978*)*. Since then, various post-colonial scholars, ranging from Indian scholars including Homi Bhaba, Gyan Prakash and Gayatari Spivak to emergent Africanist scholars such as Valentine Mudimbe, Mahmood Mamdani, have expanded upon Said's insights. These scholars have been critical of the West's tendency to analyse formerly colonized regions from culturally determined and often limited Western historical perspectives. Another key construct of post-development theory is that of hegemony**,** borrowed from Gramscian theory. Gramscian theory postulates that a ruling class often continues to convince other classes that their interests are in the interests of all through consensual means rather than coercion. Equally important an influence to post development thinking is Michel Foucault's theories on power. Foucault (1980) argues that the exercise of power in institutions directly produces knowledge seen as "truth" within a society.

Inspired by the critical stance of poststructuralists and Foucault, a group of theorists who were disillusioned with development started to question development in the 1990s. The scholars, who mainly originated from the West, began to analyse the systematic construction of the international development discourse since World War II (see Mathews, 2005). The disenchanted scholars collectively referred to as poststructuralist or post-development theorists include Escobar (1995); Crush (1995); Sachs (1992); Rahnema and Bawtree (1997) Esteva and Prakash (1998), Kapoor (2007), Biccum (2005) and Kothari (2005).

Although post-development theory is not homogenous, a distinct characteristic of the theory is that it views development as an ideology entrenched within the post-world war II historical context (Mathews, 2004). According to the theory, the development ideology since the Second World War has been shaped by socio-economic and political relations of inequality between the North and the South (Escobar, 1995). The theory therefore points to the need to trace the origins of ways of thinking by employing a critical historical framework for analysing the contextual creation of development. The post development view seeks to find out how a system of relations was historically established among development's core elements to form the whole ideology (Escobar, 1995). By so doing, post development theory is interested in

uncovering how the development ideology systematically constructed a space in which only certain things can be said and imagined.

The analytical framework acknowledges Foucault's view that power plays a central role in the creation of ideologies and therefore encourages focussing on examining the role and influence of power dynamics in development discourse. The theory relies on research methods derived from Critical Discourse Analysis (CDA) to analyse power dynamics in the creation and functioning of the development ideology (Escobar, 1995). A post-development view further critiques implication for seeing development in a certain way, and ultimately its goal is to come up with an alternative way of improving human life. The creation of an alternative to development, according to post development theory, must be based on local, indigenous knowledge and values and be the collective responsibility of local communities (Escobar, 1992; Mathews, 2004). In this regard, the study is interested in exploring the extent to which current international and African participatory ICT for development paradigms promote the production of local knowledge to guide development

3.6.1 Power and knowledge production in development policies

3.6.1.1 The influence of Foucault's power-knowledge nexus on post-development theory

Inspired by Foucault (1980), the post-development view postulates that there is a direct relationship between power and knowledge production. According to Foucault (1980), power produces knowledge and organizations that strive for power will try to influence the world view of a society to become closer to what they want it to be (also see Wodak and Meyer, 2009). Foucault (1980) however argues that power is so pervasive that it would be futile to understand its exercise in terms of what it is, and therefore recommends the examination of power in terms of its effects. Seeing power as elusive, Foucault recommends that examining the use of language by those in power has significant potential to shed light on the influence of power dynamics in the process of world making. He argues that the validation of knowledge in a society entails the disqualification of other forms of knowledge that cannot meet the dominant epistemological principles and standards. Influenced by the Foucauldian approach to power and knowledge production, the post-development view sees international development agencies as using development policies to define legitimate knowledge

or a “regime of truth” in the development sector in a way that tends to exclude alternative forms of knowledge (Escobar, 1995; Crush, 1995).

3.6.1.2 Development policies as instruments of power

Post-development theory perceives development policies as statements of power that set the rules of development from a Western perspective (Escobar, 1995). Cornwall and Brock (2006) elaborate on the function of development policies stating that development policies use words in the project of world making to create versions of the world which fit certain frames of reference.

Escobar (1995) argues that development policies are based on mainstream development theories’ assumption that some countries are developed while others are not (Escobar, 1995). Escobar observes that development policies often label development problems from a scientific point of view that removes problems from the realm of culture and politics. This technical approach is seen as enabling the development discourse to control world views about the developed and ‘under-developed’ from a Eurocentric perspective (Escobar, 1995; Cornwall and Brock, 2006; Kothari, 2005). According to post-development theory the technicalization of development enables international development policy to prescribe who can speak, from what points of view, with what authority, and according to what criteria of expertise (Escobar, 1995). Consequently, the post-development perspective sees development policy as controlling the development agenda by naming the object, subject, and solution on behalf of the poor (Escobar, 1995).

3.6.1.3 The interplay between power and knowledge production in development policies

Kapoor (2004) and Kothari (2005) argue that the exercise of power by development policies is inevitably embrocated with the formation of knowledge. The post development view sees development policies as enabling developed countries to monopolize knowledge production through the representation of the development professional as the development “expert”. Escobar (1995) and Kothari (2005) argue that development policies generally present development problems in a technicalized manner that tends to give unquestionable authority to the development professional who is an embodiment of western technical knowledge. On the other hand, Escobar

(1995) maintains that the rural farmer is portrayed in development policies as ignorant because of his geographical origins. Kothari (2005) argues that the development professional's toolkit approach often entails the universalization of pre-determined Western liberalization policies at the expense of local knowledge.

The post development view also argues that development policies make it easy for developed countries' to control development knowledge production processes through the use of friendly language suggesting collective knowledge sharing. Post development scholars argue that informed by participatory theories of development, development policies often use persuasive language to give the impression that the poor are active participants in the conceptualization and implementation of development policy (see Mathews, 2005; and Cornwall and Brock, 2006). These scholars further argue that development policies often use persuasive trendy words or buzz words such as "poverty reduction," "participation," "empowerment," "partnership," and "capacity building," to demonstrate general consensus on development (Cornwall and Brock, 2006; Mathews, 2005). According to Cornwall and Brock these words are myths designed to make the poor feel included and served by development initiatives. Cornwall and Brock maintain that development "buzzwords' provide a sense of pulling together and common goals while concealing unequal power relations between development experts and aid recipients. The study observes the existence of similar participatory words in the ICT for development policies of international development agencies such as the UNDP, USAID, DFID and CIDA. As such, the study is keen to establish the influence of participatory ICT for development theory on the framing of the UNDP and USAID ICT for development policies. Of central interest is the examination of underlying power relations evoked by participatory ICT for development policies with a view to finding out the implications for knowledge production by the poor.

3.6.1.4 The relevance of post-development theory

The study uses post-development theory to achieve two objectives. Firstly, post development theory 's critical approach enables one to problematize the discourse located in development participatory communication discourse, which has been taken for granted for very long. Unlike most of the past studies of ICT for development that tended to take an evaluation approach (see ECA Scan- ICT, Castells; 1996, ITU; 2008, Wilson and Young, 2008; Lewis, 2005; Dzidonou, 2002), post development theory offers a historical stance that makes it possible to interrogate the underlying assumptions made by development participatory communication theory about knowledge production and to analyse implications for poverty reduction. Secondly, post-development theory's systematic attention to development theories and policies enables one to trace the interrelatedness of key concepts constructing the narrative in participatory ICT for development theory, and ICT for development policies of UNDP, DFID and Rwanda. Such an approach provides a holistic approach to understanding how the entire ICT for development discourse collectively weaves an explicit and implicit representation of power in participatory knowledge production paradigms.

3.6.1.5 Critiquing a Post-development view of development policy

The study is cognisant of the massive criticism that has been levelled against post development analysis of the interplay between power and knowledge production in development policies. The major criticism levelled against post-development theory has been the fact that the perspective presents a generalized view of development policies. According to Curry (2003) and Pieterse (2000), post-development theory's view of the development agenda as that of exercising power over developing countries is tantamount to essentializing development and portraying it as homogenous and the same everywhere.

Critics argue that post development's generalized view of development policies is simplistic and problematic. To begin with, Curry (2003) argues that development has gone through various changes over the past decades hence it cannot be seen as one monolithic project. Besides, Curry argues that different development organisations have different approaches to development therefore it would be wrong to interpret development approaches as serving a common interest. Moreover, Zia (2004) and

Brigg (2000) have castigated post-development for treating developing countries as victims of an all powerful development discourse who are incapable of resisting domination. In addition, critiques have dismissed the theory on the basis of its origins. Ziai (2004) maintains that the post-development criticism of development should not be taken seriously because this thinking does not originate from developing countries themselves but it is a foreign discourse emanating from developing countries. Ziai (2004) and Pieterse (2000) further argue that the perception of development policies as instruments of power fails to realise that much development thought originated from developing countries, rather than developed countries. For the scholars, the fact that the notion of participatory development originated in Africa and Latin America demonstrates that the development discourse is not a foreign ideology imposed on developing countries by developed countries. The study, however, argues that the insistence of Western countries on prescribing conditions for providing development assistance to developing countries is tantamount to imposing development ideology on developing countries.

The study also observes that although post-development theory appears to present a generic picture of development, the post-development view of international development policies is not without basis. It is based on historical interpretation of the creation and evolution of mainstream development. Its perception of international development policies is influenced by Cox (1983), a leading proponent of Gramscian theory of hegemony who sheds light on the role of international development agencies in the exercise of power by the development discourse. According to Cox (1983), the development programme is traceable to capitalism and the emergence of a transnational regime of production (also see Keohane, 1986). Cox (1983) postulates that the capitalistic order has seen the movement of states from the embedded-liberal system towards a neoliberal world order characterized by privatization and liberalization. He maintains that international institutions play an increasingly important role in the attempt to produce hegemony around inclusive-neoliberal practices, particularly in developing countries. He argues that there are five elements that are key to understanding how hegemony operates through international institutions. These include the fact that international institutions embody the rules which facilitate the expansion of hegemonic world orders; that they are themselves the product of the hegemonic world order; and they ideologically legitimate the norms

of the world order (see Cox, 1983:172). As stated in Chapter two, although the Gramscian school acknowledges the existence of resistance against hegemony, the theory sees international institutions as capable of co-opting elites from peripheral states and absorbing counter-hegemonic ideas.

Based on Gramscian theory of hegemony, which is supported by documented evidence of the influence of international development agencies in the formulation of ICT for development policies in Africa (see Chiumbu, 2008; Moodley, 2005), the study is persuaded that the post-development view of the exercise of power in development policies is not generalized. The study agrees with post-development theory that although the development discourse has undergone a series of structural changes, the architecture of the discursive formation laid down in the period 1945-1955 has remained unchanged (Escobar, 1995). As such, international development agencies tend to rally behind a common developmentalist approach.

In a study of the rhetoric contained in mainstream international development policies, Cornwall and Brock (2006) state that although different actors in the development sector may use key terms like "poverty reduction," "empowerment" and "participation" with a range of different meanings, ultimately, the differences between these terms are sublimated to the need for a coherent meaning. Cornwall and Brock argue that development terms tend to generally co-exist and present a unified discourse which neutralizes dissonant elements that would otherwise ajar. Thus inspite of seeming differences between international development policies, one can argue that development policies generally serve a common purpose.

While post-development theory originated from developing countries, the study observes that there is a significant number of prominent African scholars such as Dahl and Megerssa (1995), Ela (1998), N'Dione et al. (1995), Chiumbu (2008), and Mathews (2004), who clearly illustrate the relevance of post-development theory to Africa. The fact that African scholars appeared on the post-development discourse scene later than Western scholars perhaps goes to show how development has created a deeply entrenched ideological hegemony over its subjects that it remains very difficult for developing countries to see themselves outside of development (Escobar 1992). Given the relevance of post-development theory to the African continent which has suffered most from the brunt of development (see Mathews, 2004), the study

seeks to contribute to African perspectives of Post-development theory by critiquing the popular ICT for development discourse from a post-development view. The review of literature critiquing ICT for development approaches has shown that despite the relevance of post-development theory to critiquing participatory development policies, the post-development perspective has hardly been used to critique ICT - based participation paradigms.

The assertion that much development thought originated from developing countries rather than developed countries is highly questionable because Europe has over the past decades prescribed technocratic development solutions to the third world by replicating western models of modernization through, health, education, industrialization and urbanization programmes (See the World Bank Development report 1998/1999).

Despite the criticism levelled against the post development view of development policies, the study concludes that it remains a credible perception of development. The study argues from a post-development perspective that the influence of development participatory communication theory on the creation of international ICT for development policies is capable of creating relations of inequality resulting in the marginalization of local development knowledge in internet-based knowledge production processes.

3.7 Conclusion

Using a post-development perspective, the study found significant power and knowledge production gaps as well as rampant denigration of poor people's knowledge in the conceptualization of development participatory communication theory, and dominant ICT for development approaches. On this basis, the study concludes that the translation of development participatory communication theory into ICT for development policies of international development agencies such as the UNDP and USAID can have serious implications for the formulation of African national ICT frameworks influenced by the discourse of these agencies. This includes the promotion of top-down information dissemination approaches and the neglect of local knowledge in favour of western knowledge in internet-based development paradigms.

The neglect of local knowledge by African ICT policies can lead to the perpetuation of the knowledge production gap between rich and poor countries in two ways. Firstly, poor people will not have a say in current internet-based knowledge production paradigms resulting in the promotion of a key dimension of poverty that is social exclusion (see Sen, 1999). According to Amartya Sen (1999), apart from economic deprivation, the poor suffer from social exclusion leading to total disregard for the poor people's capabilities in development processes. Secondly, the neglect of local knowledge tends to promote the imposition of foreign knowledge resulting in cultural domination of the continent by the West thereby increasing the knowledge production gap between rich and poor countries (Escobar, 1995, Foucault, 1980). This can perpetuate problematic modernization perceptions of poor people whereby poor countries are seen as ignorant and dependent on the rich and such a perception is capable of creating a vicious cycle of poverty in Africa.

Chapter 4: Research Methods

4. 1.Research Design

4.1.1 The qualitative research strategy

As stated in chapter 1, this study has two main objectives. Firstly, the study examines the translation of development participatory communication theory into the UNDP and USAID ICT for development policies. Subsequently, the study analyses the implications for the influence of the two international development agencies' policies on Rwanda's national ICT policy. Of central interest to the study is understanding how the ICT for development discourse addresses power dynamics influencing the participation of the poor in internet-based knowledge production processes. The broad research strategy selected to answer the study's questions is the qualitative approach.

Qualitative research, in contrast to quantitative methods covers a wide range of approaches, but by definition, none of these approaches relies on numerical measurements (King, Keohane and Verba, 1994). The qualitative approach is a methodology rooted in the phenomenological paradigm as opposed to the positivist school of thought. The paradigm is characterized by a focus on qualitative interpretation of people's perceptions and meanings attached to social phenomena, attitudes, beliefs and value systems (Leedy, 1993). In direct contrast to positivism, phenomenological approaches accept subjectivity as opposed to objectivity. Qualitative studies, according to Leedy, display the use of expressive language and the presence of voice in the text. The qualitative approach enables this study to examine the use of language and find out the entrenched meanings, and perceptions of the role of power in development participatory communication theory and ICT for development policy narratives. Such an expose gives significant potential to infer implications for the influence of international development communication discourse on African ICT policy. The main approach used in pursuing the qualitative research method is the case study approach.

4.1.2 The case study approach

According to Yin (2003) the case study approach concerns itself with the use of specific cases and case material to analyse elements of a particular subject matter, derive some lessons and draw conclusions and recommendations. Examples of case study topics include in-depth studies of organizations, institutions, programmes, events, decisions, policies and groups (Rakotsoane and Rakotsoane, 2006). Case studies focus on studying contemporary phenomenon within its real life context in order to discover the entangled relationship between phenomenon and context (Yin 2003). Depending on the requirements of the study, Yin (2003), states that a case study can rely on a single case or multiple cases for its enquiry. The study fits the case study category in two ways. Firstly the study explores three specific cases, namely UNDP, USAID and Rwanda's ICT for development policies. Secondly, because the study examines existing organizational and national policy discourses, the study can be perceived as analysing real life contexts because the discourse contained in policy shapes and enables reality (Wodak and Meyer, 2009).

The study specifically uses the multiple embedded case study approach. Yin (2003) defines an embedded multiple case study as a study containing more than a single case and involving more than one unit of analysis. As mentioned above, the study constitutes three cases and three units of analysis. The study's main focus is on the implications of the influence of UNDP and USAID's ICT for development policies on Rwanda's national ICT policy. Rwanda's policy therefore constitutes an embedded sub-unit in the broad enquiry of the influence of the discourse contained in ICT for development policies of the cited two international development agencies on the country's national ICT policy. By using the multiple embedded case study approach instead of a single case study method, the study is able to provide more compelling and robust evidence illustrating the characteristic portrayal of power relations in ICT for development policies (Herriot and Firestone, 1983).

As mentioned in Chapter 1, UNDP and USAID's ICT for development policies were selected as case studies because they are leading players in the international poverty reduction and ICT for development sector. They have also been directly involved in the formulation of African national ICT policies, including that of Rwanda, hence the two organisations are likely to espouse more or less the same international

development discourse (see Chiumbu, 2008). A study of their policies therefore provides a typical representation of international participatory ICT for development discourse. Rwanda 's policy is considered to be one of the best models for African national ICT policies hence the country's policy provides a reasonable basis for understanding the implications for the influence of international development discourse on African national ICT policies for poverty reduction.

The case study approach, however, has its own disadvantages. Yin (2003) identifies three arguments against case study research. He points that very often, case studies lack rigour. According to Yin (2003), the researcher may allow ambiguous evidence or biased views to influence the direction of the findings and conclusions. The researcher took this shortcoming of the case study approach in mind throughout the research and minimised bias by maintaining a distance from policy texts in order to let the texts speak for themselves (see Wodak and Meyer, 2009). Secondly, Yin argues that case studies provide very little basis for scientific generalization since they use a small number of subjects. Reliance on a single case exploration for instance, makes it very difficult to reach a generalised conclusion. The study acknowledges that its findings on implications for the influence of the international ICT for development discourse on Rwanda's national ICT policy cannot be generalised to other African countries because each African country has its own unique ICT-policy making experience. In this regard, there is need for follow-up studies using a broad sample of African countries to find out implications for the influence of the international ICT discourse on the conceptualization of various African national ICT policies. Such an approach is beyond the scope of this study due to time and resource constraints. Nevertheless, as stated in Chapter 1, this study argues from a post-development perspective that African countries share more or less the same historical experiences such as a colonial past and neo-colonial experiences which tend to commonly affect their position in international relations (Escobar, 1995). On this basis, the study postulates that implications for the influence of the international ICT discourse on Rwanda may reflect on other African countries whose national ICT policies are also influenced by the international ICT discourse. Furthermore, because Rwanda's national ICT policy is widely regarded as a model national ICT policy on the continent and African countries are encouraged to emulate it (Dzidonou, 2002), the study postulates that implications for the influence of the international ICT discourse

on Rwanda's national ICT policy can point towards more or less similar consequences for African countries whose discourse emulate the Rwandan ICT discourse.

Lastly, Yin (2003) observes that case studies are often too long, difficult to conduct and producing a massive amount of documentation. This study used an embedded case study approach involving three case studies. As such, the research involved analysing a massive amount of documentation to understand the narrative in each case study's ICT policy. Analysis of research data was nevertheless made manageable by organizing the huge amount of data into research themes derived from research questions.

4.2. Methods of data collection

4.2.1 Secondary Sources: Literature review

The study relied on a wide literature review to identify the key concepts of development participatory communication theory and examine how they collectively portray power dynamics influencing the use of the internet for knowledge production in poverty reduction settings. Literature review was used as a data collection method because since 2000, there has been increased criticism of development participatory communication theory's neglect of power dynamics affecting the participation of poor people in development processes (see Huesca, 2000; Leeuwis, 2000; Van der Velden, 2002 ; Cornwall and Brock, 2006; Escobar, 1995 and 2001; Crush, 1995; Kothari, 2005; Parfitt, 2004). The study therefore utilized existing critique of the paradigm to analyse power challenges facing the model in ICT settings.

The literature review largely drew from studies focussing on participatory communication theory and participatory ICT for development such as Chambers (1992); Habermass (2006); Servaes (2003); Jacobson (2003); Mefalopulous (2008); Quarry and Ramirez (2009); Servaes (2006), Heeks (2008), Hokfirchner et al. (2007), and participatory ICT for development literature from international development organisations. The study then analysed the above cited secondary sources critiquing development participatory communication theory to problemmatize the transfer of the model to ICTs. A review of literature analysing the creation of Rwanda's national ICT policy was also carried out to understand processes leading to the formulation of the

country's policy. This included Dzidonou (2002, 1998); Wilson (2006); and Mourshed (2008), Chiumbu (2008), and Bowman (2008).

4.2.2 Document analysis

To contextualize the analysis of the rhetoric in the USAID and UNDP ICT for development policies as well as Rwanda's national ICT policy, the study relied on internet documents on the information society, organizational and country historical as well as policy documents. Information society documents were used in conjunction with global governance literature to understand power relations influencing the creation of the international poverty reduction and ICT for development discourse. The study then proceeded to locate the UNDP and USAID in global governance. The USAID and UNDP websites were used to access each organization's development policy at the time of formulating their respective ICT for development policies. This helped to appreciate underlying assumptions about poverty reduction guiding the creation of the organizations ICT for development policies. To understand the context for the formulation of Rwanda's poverty reduction strategy, the research relied on historical information from the Government of Rwanda's website and websites of international development agencies such as IFAD and UNDP. The study proceeded to use Rwanda's Poverty Reduction Strategy Paper (PRSP) to understand underlying assumptions about poverty in Rwanda's national ICT policy. In the process, the study generally examined the role of the UNDP and USAID in the creation of Rwanda's poverty reduction discourse as a basis for understanding the organisations influence in the creation of the country's national ICT policy. The study then utilized global information society documents and the Government of Rwanda's website to access information explaining processes leading to the creation of the Rwandan ICT for development policy[33]. The role of the UNDP and the USAID in the formulation of Rwanda's national ICT policy was explored in the process.

After understanding the context for the creation of each ICT policy, the study utilized a discourse analysis approach from a post-development perspective to analyse the translation of development participatory communication theory into USAID and UNDP ICT for development strategies, *The Leland Initiative* (1996), and the UNDP's

[33] See rwanpap1.htm.

Digital Opportunity Initiative (*DOI)* respectively. The study also looked at the ICT for development policies of other international development agencies such as DFID and Canadian International Development Agency (CIDA) to get a broader understanding of the perception of the use of ICTs for poverty reduction by other international development agencies. Rwanda's set of National ICT policies, entitled "An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005," was the central document of analysis for the question of the implications for the influence of international ICT for development discourse on Rwanda's national ICT policy.

While relying on the internet as a method of data gathering enabled the research to access a lot of data on the role of international development agencies in the creation of the African and Rwandan information society discourse, the availability of extensive literature on the information society on the internet also posed some problems. Firstly, the transfer of the information society discourse to Africa involved various collaborations by multilateral, bilateral and private corporations for the implementation of ICT for development in Africa. The study had to carefully select some of the most significant collaborations and explore the role of the UNDP and USAID in the creation of the African and Rwandan ICT for development discourse within various and intertwined ICT for development partnerships and events. This exercise was made easier by supplementing internet resources with past studies on processes leading to the formulation of the African Information Society Initiative (AISI) such as Chiumbu (2008).

Secondly, because the study examines policy documents formulated in the 1990s, sometimes the study faced challenges in efforts to access relevant historical documents on the internet. In most cases, the study relied on archives to access historical data, but in a few cases, data indicated on Rwanda and ECA websites as available in archives was not on hand.

Lastly, internet sources pose problems of authenticity because not all published information represent the official view of an organization or can be authenticated as accurate (Jones, 1999; Kitchin, 2003 and Burham et al., 2004). The research, however, obtained most of its information from official websites such as the UNDP,

USAID, RWANDA, DFID, and Canadian International Development Agency (CIDA) websites. The study also obtained further insights on organisational policy documents from organizational employees publishing in the name of the organization such as UNDP Officer in the department of ICT Policy Formulation and e-Strategy Development, Richard Labella (2005), UNDP ICT policy advisor, Raul Zambrano (2012), and the then DFID Deputy Director of the Office for Policy Development and Coordination Michael Crosswell (2000), and published speeches from the President of Rwanda, Mr Paul Kagame. The study took cognisance of the fact that publications by employees may contain bias in favour of the organisation hence the possibility of bias was taken into account throughout the data gathering and analysis process.

4.2.3 E-mail Questionnaires

Although the major method of data collection for this study was document analysis, the study also sought to enhance its understanding of organisational documents by conducting e-mail interviews with relevant sources in each organisation. E-mail questions on the role of the UNDP and USAID in the creation of Rwanda's national ICT policy were sent to the organizations ICT policy departments. The questions asked also sought to find out how the organizations ICT policies promote the use of ICTs, especially the internet, for local knowledge production. Similarly, e-mail questions were also sent to ICT policy departments of other international development agencies such as DFID, CIDA, and IDRC to find out how other key international development agencies' promote the participation of the poor in internet-based knowledge production processes. All e-mail questions had to be sent to each agency's head quarters where policy departments are located. With the exception of DFID and CIDA, the study encountered serious challenges in efforts to interview ICT policy-makers of international development agencies via e-mail. E-mail questions were also sent to the ECA ICT policy department in Addis Ababa, as well as the public portal to the Rwandan ministry of Communication which handles all government enquiries. Questions sought to understand the role of the UNDP, USAID and other external donors in the creation of the country's national ICT policy as well as find out Rwanda's perception of the role of the poor in the use of the internet for development.

4.2.4 Challenges encountered in data-gathering processes

Major challenges had to do with bouncing e-mails due to the existence of e-mail addresses that have not been updated on organisational websites and lack of familiarity with policy issues at local offices. For instance, various e-mail addresses to UNDP ICT policy advisors provided by the UNDP website and recent UNDP publications kept bouncing back. When the researcher visited the local UNDP office for alternative e-mail addresses, after various promises to provide alternative e-mail addresses by the local UNDP ICT officer in Pretoria, it later emerged that the local office was not well versed with policy departments at Head Office and effort to get alternative e-mail addresses from the local UNDP ICT department have not come to fruition up to date. After coming across UNDP ICT policy advisor Raul Zambrano's blog, the researcher tried to chat with him on his blog but the ICT policy advisor has not responded up to date. Despite this set-back, the study still managed to supplement analysis of the DOI strategy with insights into organisational views about ICT for development from internet publications on ICT policy by UNDP policy advisors Raul Zambrano, and Richard Labella (see Zambrano and Browne, 2004; Labella, 2005). Zambrano's blog also provided useful information on the creation of the DOI strategy. The study however, had to solely rely on archival internet documents from the Government of Rwanda and ECA to examine the influence of the UNDP on the creation of Rwanda's national ICT strategy.

In the case of the USAID, the researcher relied on the organisation's website[34] to e-mail questions to the Information Services department but despite automatic acknowledgement of receipt of e-mailed questions and various follow up e-mails, there has been no response up to date. Effort to get assistance from the local office has also not yielded results as the local office continued to refer the researcher back to the USAID website. As a result, the researcher had to solely rely on USAID internet documents and information society literature accessible on the internet for background information on the creation of the Leland Initiative as well as to examine the role of the USAID in the creation of Rwanda's national ICT policy. The DFID and CIDA were the only international development agencies that responded to e-mailed questions. The Government of Rwanda and ECA have also not responded to questions

[34] See www.usaid.gov

up to date. This created a shortcoming in the study as the research needed comments from the Government of Rwanda to enhance its understanding of the influence of international development agencies in the creation of the country's national ICT policy and Rwanda's perception of ICT for development.

4.3. Data Analysis techniques

4.3.1 CDA of policy documents

The study used Critical Discourse Analysis (CDA) research methods based on Michel Foucault's conception of discourses and knowledge to examine the portrayal of power dynamics influencing knowledge production processes in each case study's ICT policy. Michel Foucault's approach to knowledge and power provides a relevant methodological framework to the study.

As mentioned in Chapter 3, Foucault sees knowledge as a construct emanating from a society, which is characterised by unequal power relations. To understand the knowledges contained in discourses, the Foucauldian approach asks the following basic questions; what is valid knowledge at a certain place and time, how does this knowledge arise and how is it passed on, and what function does it have for constituting subjects? The approach then seeks to find how knowledges are firmly connected to power relations in power and knowledge complexes. Ultimately, Foucault is interested in investigating the consequences that the knowledge in discourses has for the overall shaping and development of society. Based on the Foucauldian approach, CDA research methods realize that power is not always visible and maintain that very often, power can be inferred from the use of language by those who have the power to control discourses in society. To effectively expose hidden power dynamics manifested in language use, CDA proposes that researchers should examine both explicit and implicit linguistic manifestations of power. CDA methods scrutinize the core elements of a discourse and establish how they collectively form an entire discourse.

The CDA approach offers a methodological framework that enables the study to answer its questions. Firstly, its critical methods enable the study to investigate in detail the portrayal of power dynamics in knowledge production processes in the ICT for development policies of UNDP, USAID and Rwanda by identifying and

examining manifestations of power in the key elements of each policy. Secondly, the approach's focus on examining manifestations of power in discourses from a historical perspective is capable of shedding light on how and why the portrayal of power relations in knowledge sharing processes arose. Such an understanding is useful for guiding the analysis of implications for the influence of the discourse on Rwanda's national ICT policy.

The following CDA steps were followed to analyse the portrayal of power relations in knowledge production processes in the ICT for development policies of UNDP, USAID, and Rwanda:-

i) To understand how the discourse in each policy document expresses power relations in knowledge production processes, the analysis commenced by thoroughly reading each policy in order to select main topics or discourse strands emerging from the policy narratives.

(ii) Each discourse strand was subjected to a synchronic or cross sectional analysis by closely examining language use to investigate both explicit and implicit expressions of power dynamics in the use of the internet for knowledge production in poverty reduction contexts.

iii) A summary of the portrayal of knowledge production in each discourse strand, focussing on the articulation of power relations, was made. Each summary represented a distinct theme expressing the portrayal of power in the policy.

iv) Findings from step three were analyzed in the light of background information derived from organizational documents and in the context of the examination of development participatory communication theory done in the literature review section. This made it possible to understand how the emerging discursive patterns are firmly connected to power. When new data and analysis of linguistic devices in the discourse strands under investigation revealed no new findings the analysis of discourse strands was considered complete.

iv) To find out how the discourse strands collectively portray power dynamics in knowledge production processes in each policy, the interrelatedness of discursive themes was analysed. This was done by examining similarities and contradictions in language use and argumentation across discourse strands. The analysis culminated in a summary explaining how the discourse strands collectively portray power relations in knowledge production in each ICT for development policy.

4.3.2 Hermeneutic analysis of documents

The study relied on hermeneutic analysis for data interpretation. Hermeneutics is a qualitative research method, which focuses on the task of understanding texts. Associated with two German philosophers Max Weber and Wilhem Dilthey, hermeneutics sees the understanding of texts as not simply a scientific process of knowing concepts, but rather as a historical encounter which calls forth personal experience (Palmer, 1969). According to Palmer (1969), hermeneutics perceives interpretation as contextual and dialectical. Contextual in the sense that an event is only meaningful within a specific context and dialectical in the sense that there is a relationship between the researcher's pre-understanding of the object and her interpretation of the text. Hermeneutics postulates that the act of interpreting involves taking a position; hence there is no such thing as strictly objective interpretation. As mentioned in the theoretical framework, the study analysed its findings from a post-development perspective. Similar to a hermeneutic approach, a post-development perspective realises that all world views serve specific interests hence there is no such thing as a neutral or innocent philosophy. Hermeneutics argues that the theory of human interpretation must deal with the phenomenon of language because language shapes man's conception of himself and his world (Palmer, 1969).

By analyzing the use of language in the UNDP, USAID, and Rwandan ICT policy from a post-development perspective, the study was able to provide a deeper understanding of how the UNDP, and USAID perception of ICT for development influences the Rwandan ICT policy narrative. As stated in Chapter 3, post-development theory argues that the provision of technical and financial aid in developing countries often results in ideological influence (Escobar, 1995). In the case of Rwanda, the post-development view is validated by studies of the creation of the country's development and ICT policies by Bugingo (2002) and Bowman (2008),

which indicate that despite the participation of local communities in the creation of Rwanda's PRSP and ICT policy, the country's development policies were highly influenced by donors. A post development perspective therefore enabled the study to explore the role of the UNDP and USAID as key providers of technical and financial aid for the creation of Rwanda's ICT policy and examine the extent to which the donors' ICT discourse was reproduced in the Rwandan national ICT policy.

In a study of the influence of external actors in the creation of the AISI framework, Chiumbu (2008) states that it is difficult to determine the direct influence of external actors on the formulation of government policy because the politics and policy processes of any country are invariably complicated. In this regard, the study kept in mind methodological limitations in establishing the direct influence of the UNDP and USAID in the creation of Rwanda's national ICT policy. Nevertheless, the study managed to rely on a post-development perspective and critical discourse analysis approach to question the role of the international development agencies in Rwanda and examine similarities between the UNDP and USAID ICT for development rhetoric and the Rwandan ICT discourse.

A hermeneutic approach was utilized to analyse how the discourse in development participatory communication theory is translated into the UNDP *DOI* strategy, and the USAID *Leland Initiative.* The interpretation of data was based on both linguistic and contextual findings from the CDA analysis. The study established similarities in the representation of power relations in knowledge production processes across themes in development participatory communication theory and the UNDP *DOI* strategy. A similar comparison was carried out for the discourse in the theory and that in the USAID *Leland Initiative*. Summaries of discursive similarities between each organisation's policy narrative and the discourse in development participatory communication theory were made. The findings were combined and interpreted together, and a characterization of the translation of development communication theory into international development agencies' poverty reduction strategies was developed.

Based on findings about the role of the UNDP and USAID in processes leading to the creation of Rwanda's national ICT policy, the research then examined similarities

between the discourse in the country's policy and the integrated rhetoric in the USAID *Leland Initiative* and the UNDP *DOI* strategy. The study subsequently explored possible implications for the influence of the discourse on Rwandan national poverty reduction strategies. Analysis of implications for Rwanda was based on an overall understanding of Rwanda's socio-economic development context, findings on the influence of the UNDP and USAID e-strategies on the rhetoric contained in the country's national ICT policy. The analysis of possible implications for Rwanda was extended to the rest of the African continent because, as mentioned earlier in Chapter 1, the continent shares a common history, which tends to influence its position in international development discourses and practices.

4.3.3 Criticism of Critical Discourse Analysis (CDA) methods

In using CDA approaches, the study is aware of the criticism that has been levelled against CDA research methods. Firstly, CDA has been criticised for over-relying on text at the expense of empirical data, which is viewed by some social scientists as more objective and reliable (Brigg, 2001). Without disputing the importance of empirical research, the study holds the view that given the interconnectedness of discourse and reality, CDA approaches should not be seen as simply dealing with language and 'mere' ideas, but as contributing to the understanding of the on-going production of reality through discourse, conveyed by active subjects (Wodak and Meyer 2009: 37). The study should therefore be seen as contributing to the questioning of on-going production of reality by dominant discourses in the international development sector that directly influence and enable current development practices.

Secondly, the objectivity of CDA approaches has been questioned by scholars such as Bourdieu (1984). Given the social embededness of research, Bourdieu argues that CDA researchers cannot offer objective criticism of ideologies because they are also subjected to the societal hierarchy of power and status structures. Although absolute objectivity is difficult to guarantee in any type of research, Van Leeuwen (2006) argues that the CDA researcher is capable of remaining objective in her criticism by two means. Firstly, by making one's research position, interests and values explicit and making their criteria as transparent as possible, without feeling the need to apologise for the critical stance of their work (Van Leeuwen, 2006: 293). The study

takes a post-development position. Although such a position is ideological, the research methods employed enabled one to maintain distance from the data which were being investigated thereby allowing the texts to speak for themselves. Secondly, the CDA steps also separated descriptive data from interpretation thus enabling transparency and retroduction of analysis.

4.4 Ethical issues

The University of Witwatersrand has a research policy that stipulates that all research involving human subjects must obtain clearance from the Human Research Ethics Committee prior to conducting research. As stated earlier, this study relied mainly on policy documents and literature review as prime sources of data to analyse the discourse contained in the USAID, UNDP and Rwanda's ICT policies. As such, the researcher did not need to obtain clearance from the Human Research Ethics Committee since the study did not envisage use of human subjects. Mid-way into the study, the researcher realized the need to supplement the study's understanding of policy documents with comments from USAID, UNDP and Rwanda's ICT policy makers and e-mail questions were sent to respective organisations.

4. 5 Summary and conclusion

Inspite of criticism levelled against CDA paradigms, the approach offered critical methods for examining development participatory communication theory and exploring its translation into ICT for development policies of international development agencies. The research method also enabled the study to further examine implications for the influence of international ICT for development rhetoric on African national ICT policies. In this regard, the study has potential to provide data indicating areas for further empirical research on power dynamics influencing the participation of the poor in internet-based development knowledge production processes.

Chapter 5: Data Analysis: Analyzing the translation of development participatory communication theory into the UNDP and USAID ICT for development policies

5.1 Introduction

This Chapter uses a discourse analysis approach to analyse the translation of development participatory communication theory into the UNDP and USAID ICT for development policies, namely the Digital Opportunity Initiative (DOI) (2001) and Leland Initiative (1996). As stated in Chapter four, a post-development perspective is utilized to interpret the poverty reduction rhetoric contained in the policies and further infer implications for the portrayal of the use of the internet for poverty reduction.

5.2 The role of development theory in the creation of international development policy

Post-development theory sees development experts and their development theories as playing a central role in the creation of international development policy (Kothari, 2001; Escobar, 1995). As stated in chapter 2, international development agencies began to turn to experts for policy advice due to increasing complexity surrounding development issues in the 21st Century (see Long, 2001). As demands for specialised information arose in the international development sector, networks or communities of specialists capable of producing and providing the information began to emerge and proliferate. These international networks of experts are known in the international policy sector as 'epistemic communities' (see Haas, 1992, Dobbin, Simmons, and Garrett, 2007). Haas (1992) defines an epistemic community as "a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy relevant knowledge within the domain or issue-area" (Haas, 1992: 2).

The post-development view of the role of development theory in the creation of international development policy is influenced by neo-Gramscian perceptions of the role of epistemic communities in the creation of international development policy (see Cox, 1986; Escobar 1995). Gramscian scholar Haas (1992) perceives members of epistemic communities as holding in common a set of principles and causal beliefs as

well as having shared notions of validity and a shared policy enterprise. He further states that specialists called upon for policy advice by international development agencies bring with them their interpretations of the knowledge, which are in turn based on their causally informed vision of reality and their notions of validity. Haas (1992) maintains that the combination of shared causal beliefs and principled beliefs held by epistemic community members would inform the advice they offer to international development agencies. Thus the knowledge provided to international development agencies by experts is theoretically selected and interpreted and functions only within a network of presupposed theories (Haas, 1992). Haas (1992) contends that the information used to create consensus around development theories is a product of human interpretations of social and physical phenomena. As a result, Haas argues that development theories purveyed by academic experts can be seen as carrying their epistemic norms and values.

Haas (1992) acknowledges the existence of different opinions within an epistemic community, but he points out that community members engage in internal and often intense debates leading to a refinement of their ideas and the generation of a new consensus about the knowledge base. Because epistemic communities consist of interrelated roles which grow around an episteme, Haas argues that they delimit each other and ultimately reach what is commonly regarded as a proper construction of social reality. He states that when consensus is reached within a given domain of expertise then consensual knowledge is diffused to and carried forward by other development actors such as governments and international development agencies.

Based on Gramscian explanation of the role of academic theories in the creation of international development policy, post-development theory contends that Western countries harbouring leading academic institutions that uphold liberalization principles of development such as Chicago, Harvard, and Oxford play a central role in the framing of international development policy discussions through extensive marketing of ideas in academic conferences, journals, research collaboration, and a variety of informal communications and networks (Escobar, 1995, Kothari, 2005). Thus according to Escobar (1995) the “invention” of development theories by the West involves the creation of an institutional field from which discourses are produced and put into circulation. Escobar (1995) and Kothari (2005), conclude that

this leads to the universalization of so called “scientific” theories of development that are designed to safeguard the material interests of powerful countries who fund the bulk of ‘expert’ and ‘scientific’ research. Post-development theory argues that the acceptance of knowledge from development experts is largely influenced by the material interests of developing countries who tend to have more or less similar neo-liberal economic interests and commonly converge around neo-liberal principles of deregulation; privatization and free trade (see Kothari, 2001; Cornwall and Brock, 2006). Consequently, post-development theory sees a convergence of neo-liberal interests between blue-chip international development research institutions that invent development theories and developed countries (see Kothari, 2001; Cornwall and Brock, 2006).

According to Escobar (1995), international organisations like the IMF, the World Bank and the UN, the national planning agencies of states in the Third World (now known as emerging economies) and local development agencies as involved in the “institutionalisation” of development theories (Escobar, 1995). Escobar states that the system of power relations established among international development institutions and the systematisation of these relations to form a whole, often determines the conditions under which development theories can be incorporated into international development policy (Escobar, 1995: 40-41). Ultimately, Escobar states that what is included as legitimate development issues in international development policy may depend on specific power relations established in the midst of the creation and marketing of development theories. Gramscian theory supports this view arguing that international development policy creation is a very complex process, hence the influence of epistemic communities in the creation of international development policy should not be seen as absolute (Haas, 1992). Haas (1992), for instance states that final policy decisions are often the prerogative of a few high-level decision makers who weigh a number of complex and non-technical issues in the interest of pre-existing institutional goals.

Despite the existence of complex power relations limiting the extent to which development theories influence international development theory, Haas (1992) sees experts’ claims to scientific knowledge which is supported by tests of validity, as according them influence over policy debates and serving as their primary social

power resource. He contends that experts derive power over other groups involved in policy making through their professional pedigrees and validity tests which act as a barrier to entry into policy debates and limit the influence that other groups might have in the policy debate. Haas argues that the epistemological impossibility of confirming access to reality means that the group responsible for articulating the dimensions of reality has great social and political influence.

Secondly, Haas (1992) argues that because epistemic communities share causal and principled beliefs, they are able to offset pressures for them to offer alternative advice which is more consistent with the pre-existing political interests of high level policy makers. Haas maintains that even epistemic communities called in for political reasons can succeed in imposing their views and moving towards goals other than those initially envisioned by the decision makers resulting in the development theories of experts influencing development policy.

Thirdly, Haas (1992) states that when decision-makers have no strong preconceived views and beliefs about an issue area in which regulation is to be undertaken for the first time, an epistemic community can have an even greater impact in shaping their interpretations and actions and establishing the patterns of behaviour that they will follow in subsequent cases regarding the issue area. Eventually, even if knowledge derived from epistemic communities is only partially adopted by decision makers in international development agencies, the role of epistemic communities in the initial identification of interests and decision-making procedures will have a major influence on subsequent policy choices, alternatives deemed possible, and actual behaviour (Haas, 1992). Post-development scholars concur that development theories espoused by epistemic communities tend to influence policy creation by framing the issues for collective debate, thereby influencing subsequent negotiations and bringing about preferred outcomes to the exclusion of others (see Escobar, 1995; Cornwall and Brock, 2006). From this perspective, this chapter uses a discourse analysis approach to examine the extent to which development participatory communication theory influences the rhetoric contained in the UNDP and USAID ICT for development policy narratives.

5.3 Revisiting the ICT for development rhetoric within development participatory communication theory

A quick recap of the analysis of the ICT for development discourse within development participatory communication theory helps to examine the translation of the paradigm into ICT for development policies of international development agencies. A review of the ICT for development discourse within development participatory communication theory in Chapter 3 found out that development participatory communication theory considers ICTs, especially the internet, as "enablers" or "tools" for development because of their capacity to facilitate global knowledge sharing leading to poverty reduction (Servaes, 2006; Yves, 2010; Harris, 2004). To be relevant to poor communities, advocates of development participatory communication theory recommend that the internet must focus on providing relevant local content in local languages addressing poor people's basic needs such as health, education, and economic needs (Servaes, 2006; Quarry and Ramirez, 2009; Yves, 2010). Proponents of the theory also state that use of the internet in key public and private sectors can contribute to development by improving efficiency leading to improved access to basic services and a variety of commercial products at an affordable price (Servaes, 2006; Yves, 2010). In addition, the theory postulates that use of the internet to provide access to expert information to farmers situated in remote areas can enhance efficiency and productivity resulting in food security and development (Servaes, 2006). On a global scale, champions of development participatory communication theory believe that access to the internet by the poor can enable them to access global economic opportunities such as competitive markets and employment opportunities (Serveas, 2006).

To ensure that the internet is used by poor communities in ways that directly meet their development needs, development participatory communication theory advocates empowerment of the poor. The theory states that the poor must own and control the internet to enable them to produce their own local content. According to the theory, the production of local content enables the poor to share their diverse indigenous knowledge and define development from their own perspectives (Quarry and Ramirez 2009; IFAD, 2003). Advocates of the paradigm also recommend implementation of neo-liberal policies based on privatization and free competition to attract foreign investors to finance the development of telecommunications infrastructure in

developing countries leading to universal access to ICTs (see Servaes, 2006; Yves, 2010). Finally, advocates of participatory communication propose that African countries must use a broad participatory process to formulate home grown ICT for development policies that promote equitable public participation in the information society as both producers and consumers of information and knowledge (Servaes, 2006).

A post-development analysis of the ICT for development rhetoric within development participatory communication theory found out that the rhetoric within development participatory communication theory neglects power inequalities inherent in society that can influence the use of the internet for knowledge production by the poor (Hokfirchner et al., 2007). Chapter 3 observed that development participatory communication theory espouses a predominantly neo-liberal perception of the use of ICTs for development which ignores the existence of economic and political inequalities between developed and developing countries which often make it very difficult for the later to benefit from globalization and free trade. In the same vein, the international aid rhetoric contained in development participatory communication theory neglects the existence of unequal power relations between donors and aid recipients in ways that can lead to ideological influence (Escobar, 1995). The study then argued that lack of consideration for power in the conceptualizing of the theory can promote the dominance of rich and powerful developed countries in the use of the internet for knowledge production resulting in the exclusion of local knowledge in ICT-based knowledge production processes.

Chapter 3 also found that the ICT for development rhetoric within development participatory communication theory tends to denigrate local knowledge by representing poor people as having inherent information needs and generally representing knowledge as information thereby disqualifying complex indigenous knowledge that cannot be disseminated as information (Van der Velden, 2006). Closely related to the denigration of local knowledge by development participatory communication theory, the study also found the existence of knowledge production gaps in the theories' rhetoric on ICTs for development suggesting that development knowledge derived from the internet can be universalized. The study argues that the denigration of local development knowledge and the existence of knowledge

production gaps in participatory ICT for development literature can lead to the imposition of foreign knowledge in developing countries as local knowledge is seen as backward and Western information dominating the internet is regarded as applicable to developing countries.

This chapter finds that the discourse within the DOI strategy and the Leland Initiative is to a very large extent informed by development participatory communication theory's framing of ICT as "enabler" of global knowledge sharing and development. The study observes that the translation of development participatory communication theory into UNDP and USAID ICT for development policies tends to produce an overarching narrative of globalization as leading to poverty reduction. The globalization theme is pervasive in the policies' framing of ICTs as contributing to poverty reduction through globalization, liberalization, enhancement of access to basic services, promotion of efficiency and participation (see Servaes, 2006). The poverty reduction narrative in the above mentioned themes rests on beliefs of the supremacy of Western technology and knowledge, and persistently neglects power dynamics influencing development (Escobar, 1995). The study argues that such Eurocentric representation of the use of ICT for poverty reduction can perpetuate inequality between developed and developing countries. This can result in the neglect of poor people's knowledge in internet-based knowledge production paradigms and the perpetuation of poverty in developing countries.

5.4 Describing and problematizing the meanings of poverty reduction in the UNDP and USAID ICT for development policies

5.4.1 Poverty reduction as caused by globalization

Firstly, based on development participatory communication theory's perception of ICT as "enabler" or "tool" of development because of its ability to facilitate global knowledge sharing resulting in poverty reduction (Servaes, 2006; IFAD, 2003), the DOI and the Leland Initiative portray ICT as "enabler" and "tool" of globalization and development.

According to the DOI; “Unprecedented global flows in information, products, people, capital and ideas offer great potential for radical improvements in human development” (DOI, 2001: 5). Globalization is therefore described as making an extraordinary contribution to poverty reduction. The DOI perceives ICT as central to development because of their role as “enablers” of globalization. Explaining the link between ICT and the above stated global flows, the DOI states that “These flows are enabled by Information and Communications Technology (ICT): their sheer scale and pace would not be possible without the ability to connect vast networks of individuals across geographic boundaries at negligible marginal cost” (DOI, 2001: 5). Consequently the globalization, ICT and poverty reduction discourse is presented as inseparable, a position derived from development participatory communication’s perception that there is a direct link between the use of ICTs for global knowledge exchange and development.

Similarly, the Leland initiative perceives development as “dependent” on globalization stating that, “economic growth and development are increasingly dependent upon global and domestic information flows, which in turn depend upon sound telecommunications systems (Leland Initiative, 1996: 11). This view of global information flows as enabling development is also found in the Canadian International Development Agency (CIDA’s) *Strategy on Knowledge for Development through Information and Communication Technologies* (ICT). CIDA’s strategy states that, “It is the digital divide which largely prevents the equal sharing of knowledge worldwide and leads to "information and knowledge poverty" among certain groups. If only a select number of countries reap the benefits of ICTs while others continue to lag behind, the digital divide will continue to grow” (see CIDA's *Strategy on Knowledge for Development through Information and Communication Technologies* (ICT), (year of publication unknown: 5). Consequently, like the USAID Leland Initiative (1996) and the UNDP’s DOI, CIDA’s ICT for development policy is informed by development participatory communication theory’s view of global information sharing as leading to poverty reduction.

By representing development as “dependent” on globalization, which is in turn “enabled” by ICT, the DOI and Leland Initiative seem to portray ICT and globalization as indispensable catalysts of development. As a result, the USAID and

UNDP ICT for development policy narratives tend to provide a universal prescription for poverty reduction that suggests that development cannot be imagined outside globalization, and ICTs (see Escobar, 1995). The Leland Initiative confirms this categorically stating that, "in general, countries with policies that have encouraged modernization, growth, and diversity in their telecommunications industry are experiencing greater economic development. Accordingly, developing countries should consider their telecommunications systems not just as public utilities but rather as tools critical for social and economic improvement" (Leland Initiative, 1996: 11). Thus the Leland Initiative "generally" prescribes that developing countries "should" adopt ICT on the basis of its success in developing countries. Such a prescriptive approach to development borders on modernization beliefs of Western supremacy and tends to eliminate alternative local definitions of poverty reduction (Biccum, 2005; Escobar, 1995). Esteva (1987) argues that when the adoption of communication technologies is forced on people and places, it remains potentially dangerous and disruptive.

Emulating development participatory communication theory's assertion that ICTs should not be seen as a panacea to poverty, (Servaes, 2006), the DOI denies prescribing ICT as a universal solution to poverty arguing that "it should be clear from the outset that ICT is not a panacea for the developing world's problems. Numerous factors influence the extent and speed of social and economic development—not least political stability, physical infrastructure, basic literacy and basic health care. There is no suggestion that ICT can eliminate the need for these or offer a panacea for all development problems. But detailed analysis of experience around the world reveals ample evidence that, used in the right way and for the right purposes, ICT can have a dramatic impact on achieving specific social and economic development goals as well as play a key role in broader national development strategies" (DOI, 2001: 9). In this excerpt, although the DOI repeatedly refutes the notion of ICT as a panacea for poverty, the study finds the DOI's denial problematic. The denial that ICT can cause development is followed by a disclaimer, "but" which is followed by the use of normative and absolute terms such as 'right", "ample", and "key" to reinforce the very view of ICT as universal solutions to poverty that the DOI attempts to refute.

Based on development participatory communication theory, both the DOI and Leland Initiative portray poverty reduction as achieved by the use of ICTs to access global opportunities. The policies allude to similar global opportunities as those cited by advocates of development participatory communication theory stressing the use of the internet to enable the poor to access global markets and employment. The DOI argues that, **"**Through the creation and expansion of networks, ICT can transcend cultural and linguistic barriers by providing individuals and groups the ability to live and work anywhere, allowing local communities to become part of the global network economy without regard to nationality, and challenging current policy, legal and regulatory structures within and between nations" (DOI, 2001: 10).

Similar global opportunities are alluded to by the Leland Initiative pointing out that, "The Internet--particularly its World Wide Web--can be used to reach a mass market of tens of millions in a graphic, visually appealing way. With robust Internet connectivity, a developing country could encourage export earnings through telecommunications free zones as well. One such office-park style free zone, using an earth satellite link to North America, is already in operation in Grenada. The operation created over 200 new positions to process 100,000 Federal Express waybills, which arrive as data images, every day. It is estimated that Federal Express' needs in this area alone could ultimately create over 2,000 jobs (Leland Initiative, 1996: 8). Like the DOI, the Leland Initiative therefore perceives ICT as contributing to development by facilitating access to mass markets, increasing country exports and creating employment opportunities. Because of the various global development opportunities availed by the use of ICT for development, the DOI strategy advocates the use of ICT to enhance competitive global positioning of developing countries in order for them to realize opportunities in the global economy (DOI, 2001: 29). The perception of ICT as enhancing global competitiveness is also found in CIDA's ICT for development policy which states that "New and powerful technologies can also promote efficiency of enterprises competing in the global economy" (see CIDA's *Strategy on Knowledge for Development through Information and Communication Technologies (ICT*), year of publication unknown: 3).

The DOI and Leland Initiative's view of ICTs as enabling the poor to access global markets and employment rests on liberalization's faith in free markets and the

assumption that market forces can solve the world's development problems by effectively governing and creating wealth for all participants (Escobar,1995). As stated earlier, this position is problematic because it ignores the existence of power inequalities between developed countries and developing countries, a situating enabling developed countries to control the use of ICTs for global trade to their own advantage (Escobar, 1995; Crush, 1995). Gereffi et al. (2005) support this position arguing that as suppliers in developing nations are integrated into global value chains, they are often required to meet production requirements not applicable in their local markets. The scholars argue that this tends to increase the amount of control required and exerted by buyers and also sets up a gap between capabilities needed for domestic markets and capabilities for export markets. Consequently, the use of the internet for economic global integration may not necessarily result in poverty reduction in poor countries as increasing control by rich countries can actually perpetuate the gap between the rich and the poor.

Although the DOI seems to acknowledge the ability of globalization to perpetuate poverty, it does not adequately address the influence of power on access to global opportunities by developing countries. To begin with, the DOI acknowledges the ability of globalization to perpetuate poverty arguing that if global flows are, "left unabated, they may also serve to worsen and entrench the spiral of poverty which already exists in many communities and countries, (DOI, 2001: 5). Although the DOI cautions that globalization should not be left unabated, it does state who should control globalization (Escobar, 1995). The ensuing narrative in the DOI however seems to suggest that ICT intervention should bridge global inequalities. The DOI asserts that, "The current debate on the importance of access to ICT and its value in addressing global development disparities is part of this wider discussion on the potential benefits and risks of globalization. This relationship between ICT and globalization makes ICT interventions critical to development policy (DOI, 2001: 7). The affirmation that ICT "intervention" is "critical" to development in a globalization context clearly shows that the DOI assigns the responsibility of managing globalization to benefit everyone to ICT. Thus the role of managing globalization is indirectly given to the West where the ICT for development discourse emanates (Escobar, 1995).

A similar view is also found in the development rhetoric of the DFID which states in its White paper (2000), that its central role is that of managing the process of globalization in a way that "works" (see Short, 2000: 5). Seeing Western technology as capable of controlling globalization in the interest of the poor is problematic because this leaves the use of the internet to attain global equality dependent on Western benevolence (see Escobar, 1995). This can make it very difficult for developing countries, especially poor communities to receive the above cited benefits of the use of ICT for globalization as Western countries control information flows on the internet to their own advantage.

Moreover, the DOI seems to accommodate the conflicting discourse of globalization as having the ability to perpetuate poverty in the strategy's narrative for the use of ICT for competitive global positioning of developing countries. According to the DOI, "While global positioning is essential for countries to realize opportunities in the global economy, it does not necessarily translate into gains for the population, particularly vulnerable and disadvantaged groups. Moreover, a focus on such positioning needs to be supplemented by the use of ICT to achieve specific development objectives ..." (DOI, 2001: 29). The use of ICT to improve global positioning of developing countries is therefore seen as "essential" but at the same time the DOI typically inserts a disclaimer warning that global positioning of countries may not necessarily benefit the poor.

The study observes that the conflicting discourse warning that globalization can perpetuate poverty does not lead to questioning of globalization serve for qualifications on the need to "abate" globalization and "supplement" a globalization approach to ICT. Quoting Bhabha (1994), Biccum (2005) states that in mainstream development discourse, disavowal is not merely a principle of negation or elision, but it is a strategy for articulating contradictory statements of belief (Bhabha, 1994: 132). Biccum (2005) maintains that the accommodation of counter discourses within mainstream development discourse is used to silence dissenting voices that can question the relevance of the poverty reduction discourse. It would appear as if the DOI attempts to silence debate on the inherent limitations of the globalization discourse by merely acknowledging the existence of the conflicting argument that

globalization can perpetuate poverty in developing countries without necessarily accounting for it.

Biccum, (2005) further argues that the representation of globalization as availing great poverty reduction opportunities and the realisation that if not properly managed, globalization can generate even greater inequality is tantamount to acknowledging that globalization is itself the cause of poverty. He argues that if globalization is not the cause of poverty then why do advocates of globalization take responsibility for poverty reduction?

5.4.2 Liberalization and poverty reduction

Closely related to the discourse of globalization and ICT as leading to poverty reduction is the view of liberalization as a solution to poverty. The globalization and liberalization discourse within the DOI and Leland Initiative appears to be based on development participatory communication theory's association of liberalization with "universal access" to ICTs. As stated in Chapter 3, development participatory communication theory recommends the implementation of liberalization policies of free and open markets in developing country in order to attract foreign investors who can invest in infrastructure development resulting in universal access to ICTs, especially in remote areas (Unwin, 2009; Hamel, 2010; and Servaes, 2006).

In the same vein as development participatory communication theory's globalization and liberalization discourse, the DOI states that "Reducing a country's barriers on inward and outward trade flows is an important prerequisite to securing the full benefits of global positioning and gaining access to ICT at affordable prices" (see DOI, 2001: 37). By advocating the reduction of trade barriers the DOI is indirectly calling for liberalization policies. The strategy's representation of liberalization as a "precondition" for realising the benefits of globalization and gaining access to ICT tend to portray liberalization as an integral component of the globalization, ICT and development discourse. The DOI strategy therefore echoes the liberalization and "universal access" rhetoric pervasive in dominant participatory communication literature which frames liberalization as leading to ICT spread and access to development opportunities (Unwin, 2009; Hamel, 2010; and Servaes, 2006).

Quoting Adam (1993: 6), the Leland Initiative also represents liberalization as a popular component of ICT and development. The strategy says, "Privatization and liberalization, two separate but related processes, are the most widely used procedures for restructuring state-owned telecommunications industries. Many countries use these processes in order to encourage expansion and improvement of their telecommunications networks and provide needed new services." This description of liberalization as "most widely used," portrays liberalization as a universal approach to national ICT for development strategies, thus like the DOI, the Leland Initiative is informed by development participatory communication theory's perception of liberalization as an integral aspect of ICT and development.

In the Leland Initiative liberalization is defined as, "the political and regulatory changes that accompany privatization. These changes help ensure that privately-owned corporations operate efficiently for the public good (Leland Initiative, 1996: 12). By constructing liberalization as for the "public good," the policy appears to portray liberalization from a moral perspective. The Leland Initiative further explains that "By ensuring fair and open access to facilities and networks, thus promoting competition, governments can dramatically increase the availability of information services to consumers. Particularly in the case of rural connectivity, which may require the construction of entirely new infrastructure, government may need to fund some infrastructure construction itself, provide incentives to private organizations, or allow at least partial foreign ownership of such ventures (Leland Initiative, 1996: 14). Thus akin to the poverty reduction rhetoric within development participatory communication theory, liberalization is persistently portrayed in the Leland Initiative (1996) as moralistic by portraying its role as that of "particularly" enabling access to ICTs and information in rural communities.

Furthermore, the strategy sees a correlation between ICT spread and democracy. Quoting Hegener (1996: 5) the policy argues that, "Tele-connected societies are theoretically more democratic. Attempts to quantify telecommunication's impact on democracy have argued that totalitarian regimes are untenable where telephone densities are greater than 20 per 100 inhabitants" (Leland Initiative, 1996: 8). Ultimately, ICT spread is portrayed as serving the moral goal of enhancing democracy by enabling more people to have access to ICTs. Similarly, the DOI

portrays liberalization from a moral perspective stating that “Until recently, the financial situation of a country's public telecommunications company defined its ability to build and maintain core network infrastructure, as well as to provide universal access. However, with privatization, liberalization and policies aimed at increasing competition in the sector, there is a greater involvement of the private sector in infrastructure provision” (DOI, 2001, p: 33). Thus as articulated in the ICT and globalization rhetoric, liberalization principles of free markets and competition are seen as enabling access to development opportunities by facilitating “core” infrastructure development necessary for universal access to ICTs and global development opportunities.

The one-sided story about the benefits of liberalization and ICT spread to developing countries is perhaps best illustrated in the DOI strategy. In five country case studies cited by the DOI to illustrate the benefits and challenges of using a liberalization approach, ICT spread is mentioned as a main achievement. In all cases, ICT spread is associated with direct foreign investment, but interestingly, the DOI emphasises benefits to developing countries of ICT spread and remains silent about the benefits of direct foreign investment to developed countries.

In the case of Estonia for instance, the DOI states that, “An important element of Estonia's approach has been the heavy emphasis on building infrastructure. Connectivity was extended throughout the nation; including the remote island Hiiumaa, starting in the early 1990s. A concession agreement between foreign telecommunications suppliers and the Estonian Telephone Company helped to ensure that connectivity in rural and scarcely-populated areas was addressed” (DOI, 2001: 26).

The above citation portrays infrastructure development by foreign companies as motivated by helping to ensure connectivity for the marginalized in rural and scarcely-populated areas and therefore a moral obligation. In line with this, the DOI highlights the need for “concession” to attract foreign companies capable of assisting with infrastructure development, a view that tends to portray foreign companies as doing a favour for developing countries.

As stated earlier, post-development theory challenges the moralistic representation of the liberalization and privatization rhetoric because this conceals the material interests of developing countries such as the search for large markets and cheap labour in developing countries (Escobar, 1995; Crush, 1995). From this perspective, the study questions the DOI's framing of liberalization in a way that desires to keep it structurally and epistemologically separate from wealth creation by private property owners, multinational corporations and financial capital (Escobar, 1995). According to Escobar (1995) this serves the purpose of masking the awareness that so-called domestic 'benefits' obtained from liberalisation such as "universal access" to ICTs and "democracy" are connected to external economic and political interests. This can mislead policy makers in developing countries to fall for the ICT for development discourse without questioning its hidden agenda, a situation likely to promote poverty in developing countries as hidden Western material interests control development. The representation of foreign aid as charity by the international ICT for development discourse can also create donor-recipient relationships between developed countries and developing countries. This can result in the promotion of top-down development approaches as developing countries are perceived as passive aid recipients rather than active participants in development processes.

The study observes that like the globalization discourse, the notion of liberalization as leading to poverty reduction is also accompanied by qualifications. Citing the case of Estonia, the DOI states that, "The focus on competitiveness and the associated adoption of liberalization policies is having a social cost (reflected in a declining human development index) that ICT alone has not been able to abate. Additional attention should be given to using ICT to ensure vulnerable and disadvantaged communities are not further marginalized by liberalization policies" (DOI, 2000: 27). Thus like globalization, liberalization is portrayed as having potential to perpetuate poverty. Yet again, akin to globalization, liberalization is not questioned and ICT is prescribed for mitigating the side-effects of liberalization.

In the Leland Initiative, similar disavowals are made about the role of liberalization in poverty reduction. The strategy states that; "Governmental control of taxation and tariffs gives it a powerful tool for encouraging the development of Internet-related markets. Unfortunately, many developing countries heavily tax IT equipment and

services, using them as cash cows for government funds. While this raises much-needed revenue in the short-term, high taxes and tariffs work in the long term to discourage consumer demand and telecommunications industry expansion. Zambia, for example, currently levies a 15 per cent duty on computer hardware and a 20 per cent duty on software imported into the country, thereby making computer equipment even more unaffordable in an already poor country" (Leland Initiative, 1996: 13).

The above quotation acknowledges that counter liberalization approaches of government control raise "much needed" revenue for poverty reduction. At the same time, the strategy insists that in the long-term government control discourages telecommunications expansion, a situation presented as likely to perpetuate poverty as implied in the cited case of Zambia. Ultimately, the Leland Initiative, like the DOI, maintains that despite the "short-term" negative impact on poverty reduction, liberalization is necessary for universal access to ICTs and poverty reduction. Although the poverty reduction discourse in the international ICT for development policies appears to accommodate counter discourses form time to time, it would seem as if at the end, the globalization and liberalization discourse tends to dominate the DOI and Leland Initiative's poverty reduction rhetoric (see Escobar, 1995). The prevalence of the globalization and liberalization discourse in the DOI and Leland Initiative tends to promote a commercial view of the use of ICTs for development by stressing the use of ICTs for global economic integration. Such a perception can divert attention from the use of ICTs for two-way communication and knowledge exchange as ICTs are mainly seen as facilitating global trade. Moreover, by representing universal connectivity as a method of eradicating the 'digital divide' between developed and developing, the liberalization and globalization discourse within the DOI and Leland Initiative mirrors modernization theorists' desire to bring 'underdeveloped' or 'backward' countries forward into industrial society (see Said, 1978; Moodley, 2005). This can encourage the use of the internet to bring 'backward' people into an information society thereby promoting one-way information flow from developed countries to developing countries.

5.4.3. Poverty reduction as enhancement of access

Thirdly, development participatory communication theory asserts that ICTs can cause poverty reduction by facilitating access to broad development goals in remote communities (Servaes, 2006). Chapter three found out that dominant participatory ICT for development literature is awash with "success stories" glorifying the use of ICTs to disseminate information in remote areas leading to the poor accessing basic development opportunities such as health and education (see Servaes, 2006; and Unwin, 2009c). Consequently, the theory's conceptualization of poverty as a lack of access to development information due to remoteness seems to inspire the view of poverty as a lack of access in international ICT for development discourse. Based on development participatory communication theory, the DOI and Leland Initiative tend to portray the use of ICTs to enhance access to basic services as leading to poverty reduction.

The above view is best portrayed in the Leland Initiative's portrayal of poverty as linked to "remoteness." Quoting Nagy (1995: 12) the strategy states that, "The Internet can provide the remote, "unconnected" countries of Africa with newfound abilities to participate in global trade and production, gain better access to information, achieve and maintain international competitiveness, enable more efficient public administration and management, and make possible environmentally-friendly development" (Leland Initiative, 1996: 7). By classifying African countries as "remote" and "unconnected" the Leland Initiative seems to identify geographical distance as the cause of poverty on the continent. The subsequent recommendation for the use of the internet to enable the continent to "gain better access to information" and other development opportunities tends to reinforce the view of poverty as caused by "remoteness" or a lack of access to global opportunities.

In the DOI, the recommendation for the use of ICT to enable remote communities to access health and education services clearly illustrates the above view of remoteness as synonymous with poverty. A key recommendation for the use of ICT in developing countries in the health sector is cited as that of, "facilitating remote consultation, diagnosis and treatment" (DOI, 2001: 10). Emphasizing remoteness, the DOI goes on to state that, "centralized data repositories connected to ICT networks enable remote

healthcare professionals to keep abreast of the rapidly evolving stock of medical knowledge" (DOI, 2001: 11).

The emphasis on the use of ICT to facilitate "remote" consultation and to keep "remote" healthcare professionals abreast with new medical knowledge in the above citations suggests a perception of geographical isolation as a cause of poverty, thus poverty reduction is constructed as the use of ICT to address the problem of a lack of access.

The "remoteness" motif resurfaces in the recommendation for the use of ICT in the education sector, where both the DOI and the Leland Initiative perceive the main use of ICT for poverty reduction as that of facilitating access to distance education. The DOI states that; "Distance education has been a particularly successful model in developing countries where affordability and geography have been real barriers to access" DOI, 2001: 12). As in the case of health, poverty is persistently constructed as a lack of access due to geographical reasons. Although affordability is also mentioned, geographical isolation is repeatedly emphasized in the DOI narrative while affordability is only mentioned in association with remoteness. Similarly, the Leland Initiative states that, "Like telemedicine, distance learning involves drawing upon experts in cyberspace, where physical proximity becomes irrelevant" (Leland Initiative, 1996: 7). Thus the Leland Initiative perceives lack of proximity to education services as the cause of poverty in developing countries.

The post-development perspective challenges the conceptualization of poverty as caused by a lack of access. Post-development scholars such as Biccum (2005), Escobar (1995) and Long (2001) argue that the construction of poverty as a lack of access does not question underlying causes of the condition of "lack." The scholars argue that describing poverty as "a lack" suggests that poverty is "in and of itself," and not a product of the 500 year history of capitalism or colonialism.

The study argues from a post-development perspective that the representation of poverty as synonymous with remoteness tends to divert attention from the root causes of poverty and promote a technical perception of poverty reduction as poverty is perceived as a geographical problem of lack of access. In all cited cases representing

remoteness as a cause of poverty, the DOI and Leland Initiative do not provide reasons for the location of poor communities in remote areas. For instance after citing remoteness as an obstacle to access to education, the DOI prescribes ICT as the solution stating that, “ICT has been found to significantly enhance the learning process by enabling increased access to knowledge and more collaborative and interactive learning techniques” (DOI, 2001: 12). As a result, the identification of remoteness as a cause of poverty is followed by a prescription without accounting for remoteness.

In the Leland Initiative, the identification of remoteness as an obstacle to development is typically followed by recommending ICT to close the gap between the rich and the poor. The Leland Initiative states that, “The social disparities common in developing countries threaten to create similar classes of information "haves" and "have-nots," since poor infrastructure and high costs often make the Internet available only to the wealthy. In order to bring the benefits of Internet access to as many citizens as possible, governments may need to support rural/remote connectivity schemes or plans to partially subsidize service for poorer citizens” (Leland Initiative, 1996: 14). In this account, the Leland Initiative seems to associate “remoteness” with information poverty. Like the DOI, the narrative in the Leland Initiative shifts form problem identification to the solution as it calls for governments to support “rural/remote connectivity.” A pattern is therefore established in both the Leland Initiative and the DOI narrative whereby the identification of remoteness as an obstacle to poverty reduction is always followed by the language of redress without explaining causes of remoteness.

According to Escobar (1995), the shift from problem identification to redress in mainstream poverty reduction discourse enables diversion of attention from deep-seated causes of poverty as the development rhetoric focuses on providing solutions. On this basis, the study argues that the shift in the discourse in the Leland Initiative and the DOI strategy from identifying “remoteness” as cause of poverty to offering ICT as solutions without accounting for “remoteness” enables the policies to ignore deep-seated caused of “remoteness” such as colonial land occupations that displaced local communities into peripheral areas and the dislocation of the poor due to the establishment of huge foreign business corporations in developing countries (Escobar,

1995). Escobar (1995) states that the diversion of attention from deep-seated socio-economic inequalities that cause poverty makes it possible for the agenda of development to be framed as that of eradicating 'extreme' poverty, and not poverty altogether. Typically, the DOI recommends the use of ICT for the "improvement" of health care delivery and to achieve "better" health outcomes (DOI, 2001: 10), a position suggesting the amelioration of health problems and not root causes of poverty in remote areas such as poor living conditions (see Mathews, 2005).

In addition, the portrayal of poverty as a lack of access produces a narrative in the DOI and Leland Initiative whereby like in modernization and colonial times, developed countries have a justifiable civilization mission, of which the project of introducing ICT to address the problem of "remoteness" can be seen as a continuation (see Biccum, 2005). The DOI and Leland Initiative's portrayal of "remoteness" as a cause of poverty in developing countries can legitimise one-way technological transfer from developed countries to developing countries. Like liberalization's "universal access" discourse, the view that ICTs can enhance access to development tends to promote ICT spread in developing countries thereby guaranteeing markets for western ICT products in developing countries where "remoteness" is framed as an obstacle to development (Crush, 1995).

The post-development view contends that Western technology is not value free as it carries the ideology of its inventors (Escobar, 1995; Van der Velden 2005). Consequently, ICT spread in developing countries can cause the exercise of ideological influence by developed countries on the former. This view is supported by various success stories provided by the DOI to illustrate the use of ICT in developing countries to access global expert knowledge. For instance the DOI states that "When an expert opinion is required, doctors in rural towns in Gambia send the images captured by the nurses to specialists in the United Kingdom for advice" (DOI, 2001: 11). Thus the value of ICT lies in connecting developing countries to Western expert knowledge in the same manner that ICT for global positioning enhances access to global trading opportunities. The strategy also cites the example of West Africa, "where malaria researchers use a network of satellites and ground stations to submit data for clinical trials conducted at tropical disease research facilities in London and Geneva" as an illustration of the use of ICT for better health (DOI, 2001: 11). Similar

to the first example, expert health knowledge is portrayed as emanating from the West.

In the Leland Initiative the internet is also portrayed as a source of expert development knowledge. The strategy states that, "Through the Internet, local universities, government agencies, NGOs and PVOs, and donor organizations are able to tap into a tremendous storehouse of research on environmental problems and solution" (Leland Initiative, 1996: 9). Thus local institutions are portrayed as benefitting from a wonderful store of knowledge from the internet. The Leland Initiative does not state the origins of this called "tremendous storehouse" of knowledge thereby implying that internet knowledge can be universalized. A similar view was found in development participatory communication theory's "needs based approach" recommending the use of the internet to provide "relevant" information to meet poor people "needs." The tendency by the DOI and Leland Initiative's to use illustrations that promote the use of ICTs to enhance access to global knowledge therefore has a propensity to portray the access theme as a part of the globalization and poverty reduction argument. Apart from further reinforcing notions of Western supremacy, the global illustrations of access to development totally neglect the participation of local communities in generating their own knowledge to solve development problems (see Parfitt, 2004).

5.4.4 Poverty reduction as enhancement of efficiency

Fourthly, the study observes the consistent framing of the use of ICT to enhance efficiency as capable of causing poverty reduction in the Leland Initiative and DOI strategy. The notion of the enhancement of efficiency as capable of causing poverty reduction is rampant in development participatory communication literature where access to relevant information by rural farmers is commonly cited as leading to efficiency and increased productivity (see Servaes, 2006). Based on the same belief, the DOI sees ICT as capable of enhancing rural productivity. The strategy explains that, "There are a number of ways ICT is enhancing *rural productivity*. ICT enables *solution sharing* between local people and communities, providing access to practical information on small business accounting, weather trends and farming best practices, for example. Timely access to *market information* via communications networks also helps farmers make astute decisions about what crops to plant and where to sell their

produce and buy inputs" (DOI,2001: 13). Thus like development participatory communication theory, the DOI associates increased rural productivity with access to information on various expert areas such as business accounting, weather trends, farming best practices, and markets (see Servaes, 2006). This view implies that low rural productivity is caused by ignorance and inefficiency, a view neglecting fundamental inequalities influencing rural productivity such as lack of control and ownership of the means of production (Escobar, 1995, Biccum, 2005).

The view of efficiency enhancement as a panacea to poverty is also common in the Leland Initiative. In the policy's recommendation for the use of ICT for disease control, the strategy points out that, "Widespread availability of the Internet provides a means for effective, timely tracking of disease outbreaks" (Leland Initiative, 1996: 7). Consequently, the use of words such as "timely" and "effective" to describe the use of ICT suggests a view of poverty as caused by lack of timeous or efficient response to disease outbreaks. This is emphasized in the Leland Initiative's rhetoric for the use of ICT for environmental management where the policy says, "Through satellite imaging technology, where snapshots of regional conditions can be instantaneously transmitted to anyone on the Internet, local researchers can track climatic and environmental conditions on a real-time basis," (Leland Initiative, 1996: 9). The use of adjectives glorifying the ability of ICT to track climatic and environmental conditions timeously such as "instantaneously," and "on a real-time basis," suggests a view of poverty reduction as something that can be achieved through the enhancement of efficiency.

Similarly, the DOI argues that, "scarcity of relevant and reliable information has always been a substantial obstacle to more effective environmental management" (DOI, 2001: 16). In this regard "effective" or efficient environmental management is seen as a panacea to poverty in developing countries. Consequently, the DOI explains that " using GIS and GPS systems can facilitate weather and soil monitoring, crop forecasting and the ability to optimize farm return on investment ensuring more efficient use of scarce resources" (DOI, 2001: 17). The notion of inefficiency as a cause of poverty is subsequently explicitly stated as the policy recommends the use of various ICT applications to ensure "more efficient use of scarce resources."

Similar to the portrayal of "remoteness" as a cause of poverty, resource "scarcity" is not accounted for. Instead, attention is diverted towards the solution as the DOI goes on to forecast that, "in the future, ICT may also play an important role in the fight against pollution" (DOI, 2001: 17). This tends to depict resource scarcity as natural in developing countries, a view ignoring decades of resource exploitation in developing countries as a result of colonialism and neo-colonialism (Escobar, 1995). Consequently, the portrayal of poverty as caused by inefficiency enables the DOI to assign the role of producing "relevant and reliable information" to specific scientific experts such as climate change and biodiversity specialists whom the DOI encourages to use ICT to disseminate information, "in order to enable a better understanding of climate change, and biodiversity" (DOI, 2001: 16). A host of other technical issues is also identified as relevant to addressing the problem of inefficiency and these include the use of ICT for weather and soil monitoring, crop forecasting, coastal and marine management (DOI, 2001: 16). All these issues are located within expert technical fields, thereby implying that legitimate knowledge for poverty reduction is exclusively located in the expert and technical domain. As a result, the view of efficiency as emanating from technical experts, like the globalization rhetoric rests on the belief that Western notions of development are superior and can be universalized. To this extent, the DOI and Leland Initiative's framing of poverty as caused by inefficiency in developing countries can promote the dominance of Western scientific knowledge on the internet as ICTs are perceived as conveyors of expert technical knowledge from developed countries to developing countries.

The view of ICT as contributing to poverty reduction through enhancement of efficiency was also expressed by DFID's Christine Mackintosh, Communication Officer in the department's Openness Unit in an e-mail interview dated 4 November, 2011. Asked by the researcher about DFID's perception of the role of ICT in poverty reduction processes, she pointed out that, "ICTs are needed to transmit information, to gather data, to facilitate efficient delivery of services such as health and education, and in management of business enterprises." Thus the international development sector generally tends to rally behind the notion of the use of ICT for the enhancement of efficiency as capable of causing poverty reduction.

The construction of poverty as caused by inefficiency also tends to further promote globalization as a solution to poverty because of the association of liberalization with efficiency. Citing the case of Chile, the DOI argues that ICT is capable of providing "unprecedented access to rural finance" (DOI, 2001: 13). According to the policy, the financial and information service network provided by Pride Africa, a micro-finance institution in Chile "offers micro-finance opportunities for local people and small enterprises that previously had no access to flexible financing due to rigid banking regulations and the information monopolies of government and large businesses (DOI, 2001: 14).

In the above cited example, lack of access to finance is seen as caused by inefficient policies such as "rigid" banking regulations and the existence of "monopolies." Putting the blame for poverty on "rigid" regulations and "monopolies" appears to indirectly reinforce apparently opposite liberalization policies of "free" and "competitive" markets, as "common sense" solutions to poverty in developing countries (Escobar, 1995). As a result, the framing of the use of ICT to enhance efficiency in Africa can in actual fact be the promotion of liberalisation under the guise of an "unprecedented" or new approach to development (see Biccum, 2005).

The prescription of liberalization policies as "common sense" solutions to inefficiency is clearly illustrated in the Leland Initiative. The policy points out that, "The telecommunications industry in Africa and other parts of the developing world generally have been dominated by state-owned monopolies which tend to be inefficient and provide poor quality service. One obvious solution is to turn over operation of telecommunications services to the private sector" (Leland Initiative, 1996: 11). As in the DOI, this narrative from the Leland Initiative tends to represent poverty as caused by inefficient state-owned monopolies and liberalization in the form of turning over operation to the private sector is prescribed as an "obvious solution" Escobar, 1995). Because liberalization advocates free and open markets that enable global economic integration, the association of liberalization with efficiency can therefore be viewed as indirect reinforcement of the notion of globalization as leading to poverty reduction.

5.4. 5 Participation as a solution to poverty

Finally, related to efficiency enhancement as a means of reducing poverty, the DOI and Leland Initiative construct participation as fostering local empowerment leading to development. Based on development participatory communication theory's "empowerment" rhetoric, the DOI stresses that participatory ICT for development paradigms must use local languages, provide relevant local content and promote partnerships for the implementation of ICT for development paradigms.

According to the DOI, "ICT's capability to achieve development goals will not be effectively leveraged without content that is *responsive to user needs* and local conditions, in a language that is commonly understood, and with technical specifications that are sensitive to the actual use and working environment of users. Partnerships between community networks and the private sector are key in this area, as are consultation mechanisms that facilitate bottom-up approaches and inclusiveness (DOI, 2001: 38). Reference by the DOI to "content that is *responsive to user needs* and local conditions," "a language that is commonly understood," as well as community and private sector "partnerships" suggests emulation of development participatory communication theory's "empowerment" discourse which recommends the use of local languages, provision of relevant local content and the creation of "partnerships" for the use of ICTs for development. While the "empowerment" discourse within development participatory communication theory goes on to stress local ownership of ICTs by local communities, the DOI's "empowerment" rhetoric is however, silent about ICT ownership. The study therefore observes that although the DOI broadly emulates the 'empowerment' rhetoric in development participatory theory it omits the issue of ICT ownership. Chapter 3, however, found the representation of ICT ownership by development participatory communication discourse problematic because of the theory's insistence on liberalization and reference to unqualified "partnerships" that tend to neglect power inequalities between partners thereby rendering local ownership of ICTs questionable. Thus despite the omission of issues of ICT ownership, the DOI still relies on development participatory communication theory's 'partnership' rhetoric which tends to cast local ownership of ICTs in doubt.

The above quoted 'empowerment' discourse in the DOI also makes reference to "*content that is responsive to user need*" (DOI, 2001: 38). This point is italicised in the narrative and this indicates emphasis. Emphasis on content that is "responsive" to "user needs" further casts the DOI's empowerment rhetoric in doubt because the idea of responsiveness to needs gives the impression of ICT content reacting to inherent information needs. Suffice to say that the source of ICT content as in the discourse within development participatory communication theory is not mentioned further suggesting that development information can be universalized (see Kothari, 2005, Escobar, 1995). As stated earlier, the ICT rhetoric within development participatory communication theory represents developing countries as having inherent information needs and ICTs are prescribed to provide "relevant" local content without stating the source of so called "relevant information." As stated earlier, the representation of local communities as having inherent information needs tends to promote top-down communication relationships by suggesting the existence of information and knowledge gaps in developing countries.

The Leland Initiative also states more or less similar 'empowerment' factors as the DOI. The policy states that, "Language, content, social and gender roles, and cultural preservation and relevance will determine the Internet's reception by every society" (Leland Initiative, 1996: 5). Thus by citing local languages and the provision of relevant content as critical in the use of the internet for development, like the DOI strategy, the Leland Initiative appears to be influenced by development participatory communication theory's empowerment rhetoric. Akin to the DOI, the Leland Initiative is also silent about ICT ownership. In the Leland Initiative, the cited participatory factors derived from development participatory serve the purpose of "determining the Internet's reception by every society." This represents the agenda for the use of local languages and the provision of relevant content in ICT for development paradigms as that of facilitating local "reception" of ICTs," or technological adoption. As a result, it would appear as if the Leland Initiative, like development participatory communication theory uses friendly language in order to hide the sinister motive of top-down technological transfer from developed to developing countries (Cornwall and Brock, 2006). The study therefore argues from a post development view that the omission of issues of ICT ownership in the Leland Initiative (1996) and the DOI's (2001) 'empowerment' discourse, and the creation of

top-down development communication tendencies by the policies' seemingly participatory rhetoric can reinforce the exclusion of marginalized groups instead of opening up channels for their voices (Cooke and Kothari, 2001).

The study observes that in the DOI, the "empowerment" theme seems to be intertwined with the efficiency rhetoric (Parfitt, 2004). The DOI strategy holds the view that, "ICT can contribute to fostering empowerment and participation and making government processes more efficient and transparent by encouraging communication and information-sharing among people and organizations, and within government" (DOI, 2001: 15). In this regard, the role of participation in development is constructed as that of enhancing government efficiency.

The DOI further stipulates that;

> "Identifying or engineering "win-win" situations is critical to securing lasting commitment from all necessary parties, including participation from the local community, private enterprises, non-government organizations, multilateral organizations and governments. Strong public and private institutional support and leadership is required to maintain commitment and alignment from all parties. This requires clear vision and direction, defined roles and responsibilities for all partners, adequate funding, sufficient technical and administrative means, and integration with existing local institutions" (DOI, 2001: 18).

The above stated notion of identifying "win-win" situations is derived from development participatory communication theory's "empowerment" discourse. According to the theory, the use of participatory communication strategies to build consensus for development can create "win-win" situations whereby the interests of all stakeholders, especially those of the poor, are met (Mefalopolous, 2008). Based on this relationship between participation and consensus building, the DOI's empowerment discourse is motivated by "securing lasting commitment" and "alignment from all parties." This suggests a view of participation as building consensus for development goals by ensuring devotion and consent from all parties. Consequently, the DOI's consensus building rhetoric can be seen as a component of the efficiency discourse because of its motive of ensuring the viability of development programmes.

Post-development scholars such as Mosse (1998), Kothari (2005), and Parfitt (2004) argue that constructing the goal of participation as that of promoting consensus building is in conflict with the notion of "empowerment." The scholars argue that given power inequalities between development professionals and poor communities, very often consensus building is in the interest of the mainstream development agenda, which may not necessarily represent the poor people's perspectives (also see Cooke and Kothari, 2001). This contradiction in the DOIs' participation rhetoric tends to render the DOI's poverty reduction discourse questionable as consensus building seems to be motivated by enhancing the efficiency of development programmes rather than the "empowerment" of the poor.

The view of participation as capable of enhancing the efficiency of development projects appears to be further supported by the DOI's list of requirements for participation underscoring, "defined roles and responsibilities for all partners, adequate funding, sufficient technical and administrative means, and integration with existing local institutions". This list appears to frame participation as assigning of administrative, economic, and technical roles, a view linking participation to enhancing the political and economic sustainability of development projects (see Kapoor, 2005). Such a representation of participation is in line with development participatory communication theory's assertion that " other than being a necessary ingredient for meaningful participation, two way communication also increases a development projects' success and sustainability" (see Mefalopulous, 2008: 27). As a result, Mefalopulous defines participation "primarily as a means, a valuable element to meet development goals," and Chambers advocates participation because of the increment it will give to efficiency (see Mefalopulous, 2008: 27; Parfitt 2004: 537-556). Accordingly, in development participatory communication literature and in the DOI strategy, ICT is described as "a means and not an end itself" (see DOI, 2001: 10 and Servaes, 2006). In this context, ICT, as a participatory tool, is therefore conceived as a "means" for achieving development goals. DFID's communication Officer, Christine Mackintosh also stressed this point when asked how the organisations ICT policy enables the participation of poor people in DFID internet-based knowledge production processes, she said, "We view ICTs as a means to an end, not an end in themselves. The real benefits for people, especially poor people, are far more

complex." Thus the use of ICT for participation is once again linked to the notion of participation as a "means" for achieving development goals.

Post-development scholars such as Parffitt (2004) argue that the resort to a discourse of participation as a "means" promotes the primacy of a top-down logic of using participation to meet organisational objectives efficiently as opposed to enabling poor communities to define development goals. Consequently, the representation of participation in the DOI as enhancing government efficiency can promote a perception of ICT as a "means" of enhancing the achievement of pre-conceived development goals. In this regard, the association of the participation rhetoric with the efficiency discourse by the DOI (2001) and Leland Initiative (1996) can result in the prioritization of formal bureaucratic goals resulting in external interests influencing local locations and the manipulation of local knowledge (Cooke and Kothari, 2001).

The DOI's portrayal of e-governance as a tool for participation also tends to portray one-way information dissemination and service delivery from government to citizens as leading to poverty reduction. According to the DOI, "through e-government applications that provide services and information to citizens over the Internet, governments can improve the quality and responsiveness of the services they provide to their citizens as well as expand the reach and accessibility of services and public infrastructure (DOI, 2001: 15). E-government applications are defined as "providing services and information to citizens over the Internet," thereby suggesting that one-way dissemination of information and services from government to citizens is capable of causing poverty reduction.

A similar view of e-governance is provided in the Leland Initiative, which states under its "Democracy and Governance" section that, "The Internet can improve citizens' access to government documents, services, and officials. It also allows the public to participate in the democratic process by providing a forum to express opinions and preferences" (Leland Initiative, 1996: 8). It would appear as if like the DOI, the Leland Initiative perceives the use of the internet for governance as primarily that of improving citizens' access to government, a view implying top-down transfer of information and services from government to citizens. Although the use of the internet for participation is also mentioned, this is only stated after giving

precedence to top-down communication. The Leland Initiative and the DOI's view of e-governance is problematic because it perceives the use of ICT for participation as one-way delivery of information and services from government to citizens and neglects the role of citizens in defining development information and services.

The study, however, observes the existence of a contesting participatory two-way communication discourse in both the DOI and the Leland Initiative. The ensuing narrative demonstrates the frequent use of participatory language in the DOI strategy;

> "ICT connects individuals and local communities with information and resources beyond their geographic boundaries, encouraging information dissemination, information exchange and communication. Citizens are encouraged to participate in the democratic process through ICT mechanisms such as electronic forums and bulletin boards, which enable participation in public discussions. This is especially relevant for marginalized communities and groups such as women, youth and ethnic minorities: they can share and exchange information of mutual interest, strengthen their collective power and shape their own development solutions" (DOI, 2001: 15).

In the above extract, the DOI borrows terms from development participatory communication theory suggesting two-way communication such as 'information exchange,' 'communication,' 'share,' and 'mutual interest.' The study, however, observes the existence of an underlying one-way communication discourse within the participatory rhetoric in the DOI narrative. The DOI first and foremost sees ICT as 'connecting' remote communities with information and resources. Thus ICT is consistently seen as playing the role of delivering information and services to remote communities, a process evoking one-way sender-receiver relationships. Suffice to say that as in the Leland Initiative, the DOI narrative mentions 'information dissemination' first with 'information exchange' and 'communication' only mentioned afterwards. This seems to indicate the primacy of information dissemination.

The DOI then continually evokes two-way communication in the midst of an apparently linear communication rhetoric stating that ICT enables marginalized communities to 'share and exchange information of mutual interest.' The source of information 'shared' and 'exchanged' by communities is once again not mentioned. Based on the earlier perception of ICT as 'connecting' communities with information and services and persistence silence on the source of development information, it

would appear as if the DOI perceives participation as a process of enabling poor communities to 'share and exchange' pre-conceived information from the internet. A similar mixture of top-down and bottom-up representation of the use of ICTs for participation was found in the above analysis of the Leland Initiative's rhetoric for the use of the internet for e-governance. Although the policy mentions that the internet "allows the public to participate in the democratic process by providing a forum to express opinions," like the DOI strategy's concept of e-governance, the Leland Initiative is silent about how power inequalities between government officials and poor communities influence participatory internet forums.

The DOI is persistently silent about the role of power in ICT based participatory development processes. For instance, the DOI refers to the use of ICT to promote the production and exchange of indigenous knowledge between North and South, as well as within South-and South. The DOI states that, "The development of scientific research networks on a worldwide basis, usually over the Internet, is also helping to empower indigenous research and development programs in developing countries. Virtual research groups composed of interconnected specialists in different parts of the world allow databases to be shared, conferences to be organized, papers to be circulated and discussed, and collaborative research and reporting to be undertaken. A proliferation of such collaboration is occurring on both a North-South and South-South basis," (see DOI, 2001: 12). While the DOI uses words such as 'networks,' 'interconnected' and 'collaboration' to describe research partnerships, the strategy does not mention whether power relations between North to South as well as South to South internet research groups are based on equality. Like the participation rhetoric in development participatory communication theory, the participation rhetoric within the DOI (2001) and the Leland Initiative (1996) neglects well-known social and psychological dynamics of group functioning (Cooke and Kothari, 2001). This can result in the expression of a consensus that reinforces the interests of the already powerful members of the group at the expense of the marginalized (Cooke and Kothari, 2001)

5. 5 The role of social media in development

The study acknowledges recent shifts in the use of ICTs for development in international development agencies attributable to Web 2.0, which has resulted in

interactive approaches to the use of ICTs for development communication (Corbett, Graside, Ashley, and Rambaldi, 2009). Since the emergence of social media networks in the mid 1990s, international development agencies have begun to turn to Web 2.0 as tools for the participation of local communities in development processes. Web 2.0 includes web-based communities, hosted services, applications and platforms that support them, for example, social networking websites, video and photo-sharing Web sites, social bookmarking Web sites, wikis, blogs and some VoIP services (Voice over Internet Protocols) (Corbett, Graside, Ashley, and Rambaldi, 2009). Some of the most popular social networks include YouTube, Flickr, Facebook and Twitter. These tools were created for social interaction hence they are regarded as user-driven and capable of strengthening the power of online networking (see Esterhuysen in Corbett, Graside, Ashley, and Rambaldi, 2009).According to Corbett, Graside, Ashley and Rambaldi (2009: 10), participatory Web 2.0 for development, or Web2forDev for short, is a way of employing Web services to improve information-sharing and online collaboration for development.

Advocates of Web2forDev see Web 2.0 tools as more transparent and accountable than first generation of Web sites because users can participate in weaving a web of knowledge, information and perspectives (Corbett, Graside, Ashley, and Rambaldi, 2009). They believe that the first generation of Web sites represented a mostly hierarchical approach to disseminating information as most Web sites were static, with users unable to interact online with either the content or its producers. In contrast, Web 2.0 is seen as heralding a new, more informal approach to information-sharing, shifting from a top-down to a more participatory approach to online communication. Scholars argue that Web 2.0 tools have enabled many people to explore these new technologies on their own terms mostly because these tools have a stronger focus on social and decentralised networking rather than on strategic implementation by organisations (see Ashley, Corbett, Jones, Garside and Rambaldi, 2009). Web-2.0 is also seen as enhancing communities' participation in governance by promoting the notion of citizen journalism particularly in political activism through the use of social networks to download pictures and stories capable of raising global awareness about human rights issues thereby helping hold governments and institutions to account (see Okolloh; Zuckerman; Kreutz, in Corbett, Graside, Ashley, and Rambaldi, 2009).

Despite the above mentioned shift towards social media as tools for interactive participation, the study observes that the influence of power in the use of Web 2.0 applications for development knowledge production has remained contentious. Scholars observe that the underlying processes involved in the implementation and use of Web 2.0 applications needs to give consideration to issues of power (Corbett, Graside, Ashley, and Rambaldi, 2009). They argue that much information online is dominated by developed countries and as such, Web 2.0 tools are increasing exclusion of Southern actors because of the digital divide. Zuckerman observes that lots of developing countries are still suffering from basic infrastructure problems making it very difficult for people in rural areas to participate in Web 2.0's high bandwidth activities (Zukerman in Corbett, Graside, Ashley, and Rambaldi, 2009). Esterhuysen further argues that even if Web 2.0 was accessible to communities, the paradigm would still face similar top-down challenges as the ICT for development model because the international development sector has no inclination to listen to local communities (Esterhuysen in Corbett, Graside, Ashley, and Rambaldi, 2009). She then recommends the need to appropriate Web 2.0 platforms in the context of challenging fundamental social inequalities (Esterhuysen in Corbett, Graside, Ashley, and Rambaldi, 2009). Although this study does not claim to do justice to contemporary ICT for development tools such as Web 2.0, the research contends that issues of power tend to haunt ICT-based development communication strategies in ways that promote the exclusion of poor communities from the production of development knowledge.

5.6 Conclusions

The study observes that the ICT for development discourse in the DOI and Leland Initiative is extensively influenced by development participatory communication theory's rhetoric for the use of ICTs, particularly the internet, for development. The narrative in the DOI and Leland Initiative collectively creates an overarching narrative of globalization as leading to poverty reduction and this narrative is informed by development participatory communication theory in five main ways. Firstly, the policies portray ICT as "enabler" of globalization and development based on development participatory communication theory's representation of ICT as "enabler" of global information exchange and development. Secondly, the depiction

of liberalization as an integral component of the globalization, ICT and development discourse echoes development participatory communication's "universal access" discourse which promotes access to universalized development knowledge (see Escobar, 1995). Thirdly, based on development participatory communication theory's portrayal of ICT as enhancing access to MDGs in remotes areas, the DOI and Leland Initiative also represent the use of ICTs to enhance access to basic services implying that the reduction of geographical distance can cause development. Fourthly, informed by development participatory communication theory's proverbial representation of ICTs as enabling rural farmers to access expert agricultural information resulting in increased inefficiency and growing rural productivity, the DOI and Leland Initiative portray the internet as facilitating access to global expert knowledge resulting in increased efficiency and productivity. Lastly, both policies are influenced by development participatory communication theory's 'empowerment' discourse which sees the use of local languages, and provision of local content on the internet as facilitating access to 'relevant' development information.

The above five prominent themes in the DOI and Leland Initiative are framed around the neo-liberal belief that developing countries must be integrated into global markets, adopt Western technology and expert technical knowledge to attain development, a view suggesting the globalization of development. The study argues that the recurrent representation of globalization as involving the use of ICTs to transfer expert information, knowledge and markets from developed countries to developing countries promotes the modernization view of Western superiority and accompanying perceptions of the inferiority of developing countries (Biccum, 2005). In Chapter 3, the study found similar problematic binary representations of development by development participatory communication theory which tended to promote the perception of the use of the internet for development as that of transferring development knowledge from developed to developing countries. The study therefore further argues that the DOI and Leland Initiative's globalized perception of ICT for development can promote the dominance of developed countries' knowledge in internet-based participatory communication processes in two ways. Firstly, by promoting the use of ICTs to spread expert technical information to developing countries and frequently looking down upon non-expert knowledge, the DOI and Leland Initiative tend to legitimize the exclusion of ordinary people's knowledge

from internet-based participatory communication paradigms. Secondly, the globalization rhetoric in the DOI and Leland Initiative's tends to stress the use of ICTs for commercial purposes such as accessing global markets, employment opportunities and increasing productivity, and down play the use of ICTs for participation, a situation likely to give prominence to the use of ICTs for global economic integration at the expense of participatory communication .

To analyse the influence of the rhetoric contained in the DOI strategy and Leland Initiative on the creation of Rwanda's national ICT policy, the next chapter looks at the role of the UNDP and USAID in the creation of Rwanda's national ICT policy and further analyzes the discourse within the country's strategy.

Chapter 6: Analyzing the influence of the UNDP and USAID on the creation of Rwanda's national ICT policy and examining the discourse within Rwanda's ICT strategy

6.1 Introduction

This chapter aims to achieve two things. Firstly, it seeks to understand the role of the UNDP and USAID in the creation of Rwanda's national ICT policy and further examine the influence of UNDP and USAID ICT for development discourse on the creation of Rwanda's national ICT policy. Secondly, the chapter aims to critique the use of ICTs for poverty reduction in Rwanda's national ICT policy. Of central interest to the study is finding out underlying power relations constructed by Rwanda's ICT rhetoric and examining implications for the participation of the poor in the use of the internet for knowledge production.

The chapter finds that the UNDP and USAID funded Rwanda's first ICT creation workshop in 1998 and actively participated in the creation of ideas during the workshop[35]. Analysis of Rwanda's draft national ICT policy emanating from the workshop finds striking similarities between Rwanda's ICT for development rhetoric and the UNDP's DOI and USAID's Leland Initiative. On this basis, the study argues from a post-development perspective that the UNDP and USAID were able to influence the discourse within Rwanda's national ICT policy through the provision of financial and technical aid (Escobar, 1995). The study also observes that apart from international development agencies, international ICT for development experts also played a leading role in the creation of Rwanda's ICT policy. Because international development agents are seen from a post-development perspective as agents of the dominant international development discourse, the study therefore further argues that the role played by experts in the formulation of Rwanda's ICT policy compounded the influence of the international ICT for development discourse represented by the UNDP and USAID.

Analysis of the rhetoric contained in Rwanda's national ICT policy finds that themes in the country's poverty reduction discourse collectively create binary representations

[35] See http://www.uneca.org/aisi/nici/countryprofiles/rwanda/rwanpol.hmtl

of development based on Oriental notions of the superiority of Western knowledge and technology and assumptions of developing countries' inferiority (Said, 1978; Escobar, 1995). This tends to denigrate Rwanda's local development perspectives as inferior to Western ICT-based development paradigms. Furthermore, the study also observes that the global competitiveness rhetoric dominating Rwanda's national ICT policy tends to create an overarching economic perception of the role of ICTs in poverty reduction which tends to downplay the role of ICTs for participatory communication in poverty reduction strategies. Consequently, the denigration of local knowledge combined with an overriding economic perception of ICT for development in Rwanda's national ICT discourse could promote the dominance of developing countries' knowledge and that of the local elite on Rwanda's internet in two ways.

Firstly, the portrayal of Rwandan development knowledge as backward and inefficient tends to promote the dominance of western knowledge which is conversely portrayed in Rwanda's national ICT policy as modern and efficient. Secondly, a predominantly commercial view of ICT for development tends to encourage total neglect of the use of the internet for participatory communication as ICTs are primarily seen as tools for commerce and national economic growth. Such a situation is likely to cause the neglect of local development knowledge on Rwanda's internet as the internet is seen as a tool for top-down dissemination of Western commercial information which has capacity to enhance Rwanda's economic global competitiveness.

The study also finds rampant neglect of power in the economic, technical and privatization rhetoric in Rwanda's national ICT policy. The research argues that the neglect of the existence of power inequalities adversely affecting the participation of poor people in Rwanda's ICT-based economy can further promote the dominance of developed countries' knowledge and that of Rwanda's elite on Rwanda's internet as ICTs are owned and controlled by multinational corporations in conjunction with Rwandan elite thereby making it very difficult for local communities to own ICTs and control their content (see Escobar, 1995; Crush, 1995; Ishemo, 2004; Quarry and Ramirez, 2009).

6.2 Describing Rwanda's ICT policy-making processes and analyzing the role and influence of the UNDP and USAID

6.2.1 The AISI framework

The creation of Rwanda's national ICT policy can be traced to the formulation of the African Information Society Initiative (AISI). The AISI framework was created by the UN Economic Commission for Africa (ECA) in conjunction with various international development players such as African telecommunication ministers and technocrats, numerous bilateral and multi-lateral international development agencies, academics and civil society (Chiumbu, 2008). At the creation of AISI, Rwanda had just recovered from a civil war and the country had an ambition to transform herself from one of the poorest countries in the world to a middle-income country through the use of ICTs for development (Rwanda PRSP, 2000). Consequently, as stated in Chapter one, Rwanda became one of the first countries to create a national ICT policy based on the AISI policy (Dzidonou, 2002).

Although the creation of the AISI framework involved extensive participation of African actors, a study by Chiumbu (2008) found that international development agencies such as the UNDP, USAID, UNESCO, World Bank, and SIDA were closely involved in the formulation of the African ICT policy (also see Wilson (2004) and Adam (2006). For instance, the UNDP was an influential member of the Harnessing Information and Technology for Development (HITD) whose discourse informed AISI's key objective to close the gap between the information have and have-nots (Chiumbu, 2008). Experts from the Global Information Infrastructure Commission (GIIC)[36] also acted as policy advisors for AISI (Chiumbu, 2008). Chiumbu (2008) observes that the ideas of the GIIC related to privatization, liberalization and open markets influenced the framing of the AISI policy. The GIIC is a parent organization to the USAID-led Leland Initiative, thus its influence on AISI can be seen as representing the broad American ICT for development perception including that of the USAID. In addition, the UNDP and the USAID were directly involved in the implementation of AISI as members of the Partnership for Information and

[36] The Global Information Infrastructure Commission was set up by the USA under the Clinton-Gore Administration with a view to facilitating private and public sector cooperation for the creation of the Information Society in America as well as globally.

Technology in Africa (PICTA)[37]. On the basis of the role and influence of the UNDP and USAID in the creation of AISI, the study perceives the USAID and UNDP as indirectly influencing the ICT for development rhetoric of many African national ICT policies that are based on the AISI framework including Rwanda (see Chiumbu, 2008).

6. 2 .2 Rwanda's National ICT workshop

The first step towards the creation of Rwanda's national ICT policy commonly known as the National Information and Communication Infrastructure Plan (NICI) started with the National Workshop on Information and Communications Technologies, Policy and Strategy for Rwanda held in Kigali from November 30 to December 4, 1998 (Rwanda Overall Draft NICI policy, 1998). The objective of the workshop, which was attended by high-ranking civil servants, was to sensitize decision-makers on the importance of ICT in development (Rwanda Overall Draft NICI policy, 1998). The workshop also aimed to make recommendations on the process required to establish a national strategic framework and implementation plan for the development of a national ICT policy (Rwanda Overall Draft NICI policy, 1998). The workshop was organized under the auspices of the Ministry of Transport and Communications and ECA, with financial sponsorship from UNDP, UNESCO and USAID[38]**.**

As stated in Chapter 2, at the time that Rwanda held its landmark ICT for development workshop, the UNDP and the USAID were already providing technical support to Rwanda's ICT sector. The UNDP was rehabilitating the services of the Documentation and Information Division of the Ministry of Economy and Plan while the USAID's Leland Initiative was providing technical support to Rwanda's telecommunications operator RwandaTel for the establishment of private ISPs.[39] Another international development agency actively involved in the creation of Rwanda's earliest ICT sector was the World Bank which was involved in the

[37] PICTA was a collaboration of developed countries formed in 1997 with the aim to facilitate the development telecommunications infrastructure and an ICT sector in Africa.

[38] See http://www.uneca.org/aisi/nici/countryprofiles/rwanda/rwanpol.hmtl

[39] ibid

computerisation of the ministry of education[40]. Although the USAID and UNDP were not the only international development agencies involved in early creation of Rwanda's ICT sector, the two agencies went beyond providing technical assistance for once-off ICT projects to funding a workshop on the creation of the country's national ICT policy. As stated earlier, post-development theory maintains that the provision of funding and technical aid to developing countries by international development agencies often results in ideological influence (Escobar, 1995).

The post-development view linking financial and technical aid to ideological influence is supported by the involvement of the UNDP and USAID in the generation of ideas at the Kigali workshop which mapped out Rwanda's ICT for development strategy. Because of their experience in Rwanda's development and its mushrooming ICT sector, the UNDP and USAID were commissioned by ECA and the Government of Rwanda to present a number of key papers at Rwanda's national ICT brainstorming workshop[41]. Both the USAID and the UNDP presented on "Development of human resources using ICT," and "Regional and International activities in ICT"[42]. The UNDP also jointly presented with Rwandan officials on "ICT Projects in Rwandese: possibility of integrating them and suggestions for national projects".[43] The study therefore observes that besides providing financial support for the Kigali workshop on the creation of Rwanda's ICT policy, the UNDP and the USAID provided ideas for the country's strategy.

Apart from the USAID and UNDP, UNESCO also made presentations at the Kigali workshop on "Content development and cross-cultural information exchange," and "Regional and International activities in ICT"[44]. The study however focuses on examining the influence of the UNDP and the USAID on Rwandan ICT policy because the two seem more likely to exert influence on Rwandan ICT policy because of their historic and broader involvement in the country's development and ICT sector demonstrated in Chapter 2.

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[40] ibid
[41] See http://www.uneca.org/aisi/nici/country profiles/Rwanda/rwanpap/htm
[42] ibid
[43] ibid
[44] ibid

According to Rwanda NICI policy (2000), the first and most important result from the Kigali workshop was an increased awareness among participants and top decision-makers of the importance of ICTs. Rwanda's awareness of the role of ICT in development seems to be informed by the UNDP and USAID ICT for development discourse. This can be demonstrated by similarities between the ICT for development rhetoric found in recommendations made by the Kigali workshop in its Overall Draft NICI Policy (1998) and the DOI and Leland Initiative rhetoric.

Firstly, like the UNDP ICT policy that describes ICT as "enablers" of globalization and development, the Kigali draft report describes ICT as "catalysers of new development" thereby expressing a similar view of ICT's as "unprecedented" agents of development (Rwanda Overall Draft NICI Policy, 1998: 5). Secondly, a key recommendation for the use of ICT for development made by the Kigali draft emulates the DOI and Leland Initiative's assumption that the use of ICT to improve government efficiency and enhance rural productivity can lead to poverty reduction (DOI, 2001; Leland Initiative 1996). The Kigali draft report states that, "The development of ICT in Rwanda will be reflected by and dependent on the ability of the government to integrate the new technologies in public management for more efficiency and productivity," (see Rwanda Overall Draft NICI Policy, 1998: 10). Thus Rwanda's earliest impression of the role of ICT in governance tends to emulate the USAID and UNDP notions of the use of ICTs to enhance efficiency and productivity as leading to poverty reduction.

Lastly, remarks made by the then Vice-President of Rwanda, Paul Kagame at the Kigali workshop also indicate the influence of the USAID and UNDP ICT for development discourse on the country's leader seen as the champion of the country's ICT for development strategy.[45] Speaking at the Kigali workshop, Kagame said, "If Rwanda, and Africa as a whole, does not take steps to embrace the new technological developments promptly, the technology and information gap, and the gap in access to information will increase disparities between developing and industrialized nations. We cannot afford this."[46] It would therefore appear as if Rwanda's perception of the

[45] See http://www.uneca.org/aisi/nici/country profiles/Rwanda/rwanpap/htm
[46] ibid

urgency of the ICT agenda was shaped by the UNDP and USAID's alarm about the need to close the information and technological gap between developing countries and developed countries (see DOI, 2001; Leland Initiative 1996).

On the basis of similarities between Rwanda's earliest notions of the role of ICT in development and the UNDP and USAID ICT for development discourse, the study argues that the USAID and UNDP were able to exert ideological influence through the provision of financial and technical aid during the Kigali Workshop (Escobar, 1995). Since the Kigali draft report guides the creation of Rwanda's ICT framework document which informs the subsequent formulation of the country's national ICT policy (Rwanda Overall ICT Draft Report, 1998), the study argues that the influence of the UNDP and USAID ICT for development discourse at the Kigali workshop points to possible further influence on the rhetoric contained in the country's overall ICT policy (see, Bowman, 2009).

6.2.3 The creation of Rwanda's National ICT policy

The Kigali workshop recommended the creation of a high level national ICT co-ordinating structure, the Steering Committee to oversee the creation and implementation of Rwanda's national ICT policy (Bowman, 2009). Because of the central role assigned to ICT in Rwanda's development by the Kigali workshop, Vice President, Paul Kagame was tasked to chair the Steering Committee. According to Bowman (2008) most members of the Steering Committee were civil servants who attended the country's previous high-level ICT workshop, with only two private sector representatives. Thus the drafting of Rwanda's national ICT policy was led by civil servants whose perception of the role of ICT in development was influenced by the donor-driven Kigali workshop. This team worked with a team of experts sent to Rwanda by ECA in July, August and September 1999, to prepare a draft policy document and make recommendation for the creation of the "Rwandese Information Telecommunications Authority" (RITA) to be located under the Office of the Vice-President.[47] Dr. Clement Dzidonou, a renowned African ICT for development expert led the team of experts with close assistance from a senior Advisor in ICT policy from ECA (Bowman, 2009).

[47] See http:www.uneca.org/aisi/nici.countryprofile/Rwanda/rwanapol.hmt

As stated earlier, post-development theory questions the role of experts in the creation of development policy. Based on neo-Gramscian theory of hegemony, post development scholars see development experts as agents of the Western neo-liberal discourse whose central role in the international development sector is that of universalizing the norms and values of the mainstream development discourse (see Kothari, 2005; Escobar, 1995; and Cornwall and Brock, 2006). From this perspective, the study argues that the leading role played by ICT experts in the formulation of Rwanda's national ICT draft policy could have opened the way for the influence of the international ICT for development discourse on Rwanda's national ICT policy (Haas, 1992, Chiumbu, 2008). As stated earlier, according to Haas (1992), when decision-makers have no strong preconceived views and beliefs about an issue area in which regulation is to be undertaken for the first time, an epistemic community can have an even greater impact in shaping their interpretations and actions and establishing the patterns of behaviour that they will follow in subsequent cases regarding the issue area. Given the fact that the ICT for development paradigm was new to Rwandan development discourse (see Bowman, 2002), the influence of experts on the creation of Rwanda's draft ICT policy can therefore be seen from a neo-Gramscian perspective as likely to be very significant.

The above argument is not to say that Rwandan ICT discourse was absolutely influenced by experts. Rather the study argues that although Rwandans participated in the creation of their own policy, ultimately, epistemic communities who rally behind more or less the same ICT for Development discourse as international development agencies such as the UNDP and USAID are likely to have shaped the country's rhetoric through technical aid (see Haas, 1992). This position is supported by Haas (1992) who argues that even if knowledge derived from epistemic communities is only partially adopted by decision makers in international development agencies, the role of epistemic communities in the initial identification of interests and decision-making procedures will have a major influence on subsequent policy choices, alternatives deemed possible, and actual behaviour. On this basis, the team of experts who drafted Rwanda's ICT policy can be perceived as transferring the international ICT for development discourse to the country (see Escobar, 1995).

On the contrary, it can be argued that the team of experts drafting Rwanda's policy was led by an African, hence Rwanda's draft ICT policy was influenced by African rather than international development knowledge. A study by Chiumbu (2008), however, observes that because of the hegemonic influence of the international ICT for development discourse, international development experts tend to echo the dominant international ICT for development discourse such that the presence of African experts in development policy-making processes does not guarantee the "Africanness" of development policy. Since epistemic communities and international development agencies tend to espouse a more or less similar development discourse (Haas, 1992), a combination of the influence of the UNDP and USAID and that of international epistemic communities in the creation of Rwanda's ICT for development rhetoric can be seen as indicating extensive influence of the international ICT for development discourse on the creation of the country's development strategy.

The creation of Rwanda's national ICT policy followed the ECA model involving a three phased approach. This approach, which has been adopted by many African countries, involves creating a framework document, policy and plan (Dzidonou, 2002). In this regard, the drafting committee was assigned by the Steering Committee to produce a framework document based on recommendations made at the Kigali workshop (Rwanda NICI policy, 2001). The framework document provides the basis for the development of the subsequent policy document by reviewing and analysing Rwanda's development policy in order to define the role of ICT within the country's development context (Rwanda NICI policy, 2001; and Dzidonou, 2002). In 1999, the policy drafting committee created a framework document entitled "An Integrated Framework for Socio-Economic and ICT Policy and Plan Development and Implementation for Rwanda" (Rwanda NICI policy, 2001).

Apart from relying on findings from the Kigali report, the drafting committee was also inspired by 'lessons learnt' from Asian countries such as Singapore and Malaysia to envision the use of ICT to transform Rwanda into an East African business-service hub (see Bowman, 2009 and Rwanda NICI policy, 2001: 305). Chapter 2 and 5 observed that based on lessons learnt under the UNDP's SDNP experience, the DOI strategy frequently cites Singapore and Malaysia to make the case for ICT for development in developing countries. Dzidonou (2005) points out that most countries

that followed the AISI framework also tapped from the DOI strategy to gain insights from lessons learnt in leading developing countries. By relying on case studies derived from UNDP ICT for development experiences to create its framework document, the creation of Rwanda's national ICT policy therefore continued to be influenced by the UNDP ICT for development discourse even well beyond the Kigali workshop.

The creation of a framework document was followed by a nationwide consultation and dialogue process at the end of 1999 (Bowman, 2009). This participatory process involved the Government, the private sector, civil society and the Rwandan public at large and aimed to debate the national ICT framework document as well as raise awareness among Rwandans about the role of ICT in development (Dzidonou 2005). Bowman (2008) observes that although the consultation process was relatively extensive, the goal of participation was mainly that of educating citizens about the importance of ICT without necessarily finding out their perception of how they wanted ICT to be used for development. Bowman further observes that there was a general assumption among decision makers in Rwanda that rural peasants were ignorant about ICT hence they could not contribute towards defining the role of ICT for development. A perception of peasants as ignorant is rampant in modernization literature (Escobar, 1995) and such a view is problematic because it legitimizes the exclusion of poor communities from participating in the creation of development policy. Bowman (2009) concludes that the perception among Rwandan policy-makers that local communities had nothing to offer to the formulation of the country's ICT policy made it possible for the views of experts and international development agencies to dominate the formulation of Rwanda's ICT strategy.

After a national 'participatory' process on the framework document, the drafting committee began to draft Rwanda's national policy in February 2000 resulting in the creation of a comprehensive set of ICT policies and strategies adopted by cabinet in early 2000.[48] The approved national ICT policy document is entitled "An Integrated Socio-economic and ICT Policy and Strategies for Accelerated Development" (2000). This policy document aims to create the necessary enabling environment to facilitate

[48] See http://www.uneca.org/aisi/nici/countryprofile/Rwanda/rwampol.hmt

the deployment, utilization and exploitation of ICTs within the economy. The policy focuses on eight components of the SUNRISE[49] model including; the development of a local ICT industry, national information and communications infrastructure, as well as human resource capacity. The development of the legal, institutional and regulatory framework and structures required to support the deployment of ICTs is also prioritized (Rwanda NICI policy, 2000).This model is widely used by African countries that formulated their national ICT policies according to the AISI framework (Dzidonou, 2005)

Following the policy's adoption by Cabinet in early 2000, the Steering Committee commissioned the team of experts led by Professor Dzidonou, in conjunction with a few academics, private sector leaders, and civil society members, to create a national ICT Plan based on the policy between July 2000 and March 2001 (Bowman, 2009). Rwanda's first national ICT plan, also known as NICI Plan 1, aims to implement Government policy commitments. This plan is the first of four with the purpose of serving as a cornerstone of the Government's Poverty Reduction Strategy and its long-term vision dubbed Vision 2020 over five years starting from 2001 (Rwanda NICI policy, 2001). The process of creating Rwanda's first national ICT plan has been praised in the international ICT for development sector for its quickness and ability to produce a detailed clear document with clear implementation structures, indicators and detailed time frames (also see Mourshed, 2008). The Steering Committee rapidly reviewed separate drafts made by the team of consultants at four separate working sessions in November 2000, December 2000, January 2001 and March 2001 (Bowman, 2009). By end of March 2001, the consultant had submitted Rwanda's first comprehensive ICT for development policy comprising three components; a policy, plan and structures. Rwanda's first complete national ICT policy entitled, "An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001-2005" was signed in July 2001 by Paul Kagame, who was by then the President of Rwanda. The three components of Rwanda's national ICT policy are seen as complimentary entities and part of a whole (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005). On this basis, the study examines the poverty reduction rhetoric contained in the above mentioned

[49] This model originates from the AISI framework and is widely used by African countries by AISI

policy document, which forms the basis for the country's national ICT strategy up to 2020.

As stated earlier, Rwanda's overall national ICT policy has four separate but related plans spanning from 2001- 2020. After NICI plan 1, the ICT drafting committee subsequently created 2nd, 3rd, and 4th phase plans guiding ICT policy through 2020 (Harrisson, 2005). Harrisson (2005) states that the 1st NICI plan (2001-2005) aims to develop a knowledge-based economy around ICTs and the 2nd phase of the plan (2006-2010) aims to strengthen the new economic base. The 3rd plan (2011-215) looks to sustain the development and compete in the global market for information-based services and products, while the 4th plan (2016-2020) looks at how the ICT processes can bring Rwanda to middle-income status (Harrisson, 2005). Apart from participating in the creation of Rwanda's national ICT policy, the USAID and UNDP have also been involved in the implementation of the country's NICI plans since 2001 as technical advisors (see Mourshed, 2008).

Despite widespread praise for the fast creation of Rwanda's ICT policy, Bowman (2009) argues that the creation of Rwanda's national ICT policy was a top-down affair generally controlled by Rwandese government officials, the consultant, and a UNECA observer (Bowman, 2009). He also argues that multilateral donors remained a strong force, and they played a new and extremely powerful role in policy formulation (Bowman, 2009: 10). Although the study is aware of the challenges of inferring causal relationships between policy documents (see Chiumbu, 2008), this study particularly observes from a post-development perspective, the influence of UNDP and USAID ICT for development discourse on the creation of the Rwanda's national ICT policy through the provision of financial and technical aid (Escobar, 1995). This has been demonstrated by the involvement of the UNDP and USAID at meetings generating ideas for the creation of Rwanda's national ICT policy and resulting similarities between Rwanda's ICT for development rhetoric and the DOI and Leland Initiative. The leading role played by international ICT for development experts who rally behind a more or less similar development agenda as international agencies in the drafting of Rwanda's policy can be seen from a post-development

view as also further compounding the influence of the international ICT for development discourse represented by the UNDP and USAID. In the next section, the study examines the poverty reduction discourse within the Rwandan national ICT policy. The aim is to understand implications for the participation of poor communities in the use of ICTs, particularly the internet, for knowledge production.

6.3 Describing and problematizing the meaning of poverty reduction in Rwanda's national ICT policy

6.3.1 Modernization as leading to poverty reduction

Rwanda's national ICT policy asserts that ICTs can contribute to poverty reduction by modernizing the country's economy. This view is clearly portrayed in the country's ICT-led Development Vision which states its objective as, "To modernize the Rwandan economy and society using information and communication technologies (ICTs) as an engine for: accelerated economic growth; national prosperity; and global competitiveness." *(*An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001-2005: 11, section 19*).* The use of ICT for modernization is therefore perceived as leading to development defined primarily in economic terms stressing accelerated economic growth, national prosperity and global competitiveness.

Rwanda's perception of the ICT for development paradigm as capable of modernizing the country's economy echoes modernization theories of development which view development as the transformation of developing countries' economies through the introduction of modern technologies (Servaes, 2003). This perception is problematic for the participation of local communities in ICT-based development knowledge production processes for two reasons. Firstly, the view of ICT adoption as modernizing Rwanda's economy tends to promote top-down technology transfer to Rwanda's economy and because technology is not value free (Escobar, 1995), the imposition of technology on Rwanda's economy can result in the dominance of Western ideology in Rwanda and the exclusion of local development perspectives. Secondly, Rwanda's perception of ICT as modernizing the country's economy tends to promote an inclination towards the use of ICTs for economic purposes thereby disregarding the social and cultural use of ICTs to enable poor communities to create

development knowledge capable of defining development from their perspectives (see Van der Velden, 2006).

Rwanda's economic perception of ICT for development is perhaps best illustrated in the policy's main mission statement which states its goal as, "to achieve for Rwanda a middle income status by Year 2020 and transform its society and economy into an information-rich knowledge-based society and economy by modernizing its key sectors using information and communication technologies" (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 11, section 20). Rwanda's main mission statement perceives development as synonymous with the creation of a "middle- income" society and sets itself to attain its goal through the transformation of "its society and economy," a view clearly echoeing modernization theories of development that define development solely in economic terms (see Servaes, 2003).

The study also observes that the modernization rhetoric in Rwanda's national ICT above is awash with language suggesting that ICT for development is obligatory for development. The country's policy states in its preamble that "The (Government of Rwanda) GOR acknowledges that in the new emerging economic order, the fundamental basis for wealth creation and national prosperity is information and knowledge and that Rwanda cannot afford to be without either of these" (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001-2005: 7 section 2).

To begin with, reference to the information society as "the" new emerging economic order by Rwanda's national ICT policy suggests that the information society is "the" development paradigm and therefore unquestioned. The policy then emphasises the information society's newness describing it as "new" and "emerging", thus creating the image of an imminent and inevitable development paradigm and therefore one that is obligatory. The narrative proceeds to declare that ICTs are "fundamental" for "wealth creation." This position emulates the DOI and Leland Initiative's description of ICT as "essential" for development and framing the use of ICTs for development as that of "wealth creation" further reinforces an economic view of development.

Ultimately, the policy asserts that Rwanda "cannot afford" to be without information and knowledge thereby portraying the adoption of the ICT-driven information and knowledge based economy as obligatory.

In addition, use of the word "acknowledges" to express Rwanda's acceptance of the international ICT for development paradigm indicates unquestioning acceptance of the model. The word "acknowledges" is often used interchangeably with "recognizes" in the preamble to Rwanda's national ICT policy to express Rwanda's unequivocal acceptance of the ICT for development paradigm. For instance the policy states that, "The GOR also recognizes that the information and knowledge economy is generating opportunities across all sectors in a number of developed and developing countries" (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 7, section 3).

Rwanda's unquestioning acceptance of the ICT for development paradigm is also portrayed in the preamble to Rwanda's National ICT plan 2001-2005 which quotes remarks by the President of Rwanda Paul Kagame saying that, "In the case of Rwanda, the deployment, exploitation, and the development of ICTs to support the socio-economic development of Rwanda is not a matter of choice but that of a necessity. ICTs could power the economy and move it towards an information and knowledge-based economy" (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 120). Thus the country's president clearly perceives ICT as nonnegotiable for development. According to Kapoor (2005), the use of language to rationalize the Western point of view tends to subordinate third world perceptions of the development**.** Thus the representation of the international ICT for development discourse by Rwanda's ICT policy as a "new" and unquestionable development paradigm tends to disqualify alternative local perceptions from defining development in Rwanda (see Escobar, 1995). This can encourage exclusion of local knowledge in the framing of Rwanda's ICT for development paradigm and enable the international ICT for development paradigm seen as unquestionable to dominate the creation of the country's communication policy.

Post-development scholars such as Escobar (1995) and Kapoor (2007) have questioned the constant representation of the development discourse as "new." The scholars argue that frequent rebranding of the post-World-War 11 development discourse enables the development agenda to thrive by compelling developing countries to embrace "new' development paradigms or else risk being left behind in global development processes. According to Kapoor, the constant renewal of the development discourse leaves developing countries in a position where they can never catch-up with ever-changing Western models of development. Such a situation leaves developing countries perpetually in a "developing" status and looking to the West for development (Kapoor, 2007). Consequently, the modernization rhetoric within Rwanda's national ICT strategy promotes a view of development as the adoption of new or trendy Western models of development. This can promote perpetual dependence on the West for latest notions of development, a situation likely to promote the dominance of Western development information and knowledge on Rwanda's internet (Kapoor, 2007).

Repeated reference to the information and knowledge economy as "new" also tends to represent Rwanda's existing development model as old fashioned, a view promoting the supremacy of Western models of development thereby further legitimizing the exclusion of local perceptions from influencing development processes in the county (Escobar, 1995). Although Rwanda's national ICT policy denies abandoning its existing agricultural-based development model, the study finds the denial problematic because of the prevalence of a nuanced 'old' versus 'new' dichotomy in the policy's modernization narrative. The policy states that,

> "In developing Rwanda's socio-economic and ICT Policies and Strategies to transform Rwanda into an information-rich knowledge-based society and economy, the GOR is mindful of the fact that it cannot abandon its agricultural sector. It must however make it modern, efficient and competitive. However, the GOR is aware that even such an efficient, modern and competitive agricultural sector cannot be capable of being the engine for accelerated economic growth and development, that role is assigned to the service sector," (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 13, section 24).

Despite accommodating its agricultural development model in the above quoted passage, the policy states that the agricultural sector "must" be made "modern", thereby indirectly representing Rwanda's existing development paradigm as old-

fashioned (see Escobar, 1995, and Biccum, 2005). Because ICTs have been referred to earlier on as capable of "modernizing" the economy, by prescribing the "modernization" of the agricultural sector, the policy appears to represent ICTs as tools for transforming the country's old development model. This tends to represent local perceptions of development as the "other" backward paradigm while Western models are portrayed as modernizing local paradigms (see Biccum, 2004, Escobar 1995).

The denigration of Rwanda's agricultural-based economy is rampant in the modernization rhetoric within Rwanda's national ICT policy as can be illustrated from this quotation; "The GOR further acknowledges that if Rwanda is to move, her industrially weak, subsistence agriculture based economy towards an information and knowledge economy it will need to develop a comprehensive integrated ICT-led socio-economic development policies, strategies and plans" (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 7, section 6). In this passage, Rwanda's national ICT policy represents the country's reliance on a subsistence agricultural based economy as an indication of being "industrially weak". This tends to mirror modernization theory of development's perception of industrialization as synonymous with development (see Servaes, 2003). As a result, Rwanda's local development paradigm is represented as "weak" and inferior to western development paradigms that are based on industrialization (see Escobar, 1995, Biccum, 2005). Furthermore, Rwanda's strategy portrays the country as having to "move her industrially weak, subsistence agriculture based economy towards an information and knowledge economy." Use of the word "move" in the cited narrative suggests movement or transition from existing development paradigm towards new models.

Rwanda's borrowing of the UNDP leap-frog allegory to describe the role of ICTs in development also clearly demonstrates an old-versus new mentality. The policy states that,

> "With the emerging *information revolution*, the GOR sees ICTs as a key factor for achieving progress in economic and social development in Rwanda. The Government believes that ICTs are offering Rwanda a window of opportunity to *leapfrog* the key stages of industrialization and *transform* her subsistence agriculture dominated economy into a service-sector driven high value-added

> information and knowledge economy that can compete on the global market (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 7, section 5, emphasis added).

In the quotation cited above, words such as 'revolution' and 'transform' signify complete change, and the 'leapfrog' metaphor, like the word 'move' cited earlier on further suggests taking enormous steps from past development models. The study therefore observes that Rwanda's national ICT policy persistently represents development as the replacement of old models with modern paradigms. This view perceives local perceptions of development as old-fashioned and promotes the adoption of Western technology to modernize Rwanda and cause development. Such a perception can encourage the dominance of Western technical knowledge in Rwanda's poverty reduction strategy as local knowledge is seen as old fashioned.

Apart from the existence of a nuanced old versus new dichotomy in the modernization rhetoric within Rwanda's national ICT policy, the study also observes that the country's strategy associates modernization with efficiency and poverty reduction. Rwanda's national ICT policy sees the use of ICTs to modernize Rwandan society as contributing to the enhancement of efficiency in the country's civil and public services resulting in poverty reduction. The policy states that, "The GOR is therefore committed to the deployment, exploitation of ICTs to support the operations and activities of the Civil and Public Services as part of its commitment to the modernization of the Civil and Public Services to facilitate administrative cost reduction and the promotion of efficiency in the delivery of government services to the people of Rwanda," (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 18).

In the cited passage, the use of ICTs for modernization is seen as facilitating cost reduction leading to efficient delivery of civil and public services to the people of Rwanda. A similar view of modernization as leading to efficiency and development is portrayed in a quotation cited earlier on recommending the use of ICTs to make Rwanda's agricultural sector "modern, efficient and competitive" (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 13, section 24). This view is reiterated in the policy citing its leading goal as "to modernize the agricultural sector to improve its efficiency and productivity to ensure

food security, generate rural employment, contribute to economic growth and to improve the foreign exchange generation capacity of the sector (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 13, section 26). Thus the country clearly sees the use of technology for modernization as leading to efficiency, improved productivity and a series of benefits.

The view of the use of technology as leading to increased efficiency and productivity is also found in the DOI (2001) and Leland Initiative (1996) where the acquisition of expert knowledge by rural farmers is portrayed as leading to efficient environmental management and increased productivity. This view is based on modernization theories of development that see development in linear terms whereby technological injection leads to increased out-put resulting in development (Servaes, 2003). This perception is simplistic because it ignores socio-economic factors influencing access to public, civil and agricultural services by Rwandan communities such as class, race and gender (see Escobar, 1995). Most importantly, a linear view of development promotes top-down development communication models encouraging the use of ICTs to transmit information from civil and public service experts to local communities. Such a tendency disregards the use of the internet by local communities to define and control development.

6.3.2 Global competitiveness and poverty reduction

Rwanda's national ICT policy also sees pervasive use of ICTs in Rwanda's economy as leading to competitive global positioning of the country resulting in development. This view is derived from the World Economic Forum notion of global competitiveness (Martin et al., 2007). According to The Global Competitiveness Report 2007-2008, country competiveness is defined as the set of institutions, policies, and factors that determine the level of productivity of a country (Martin et al., 2007). To be considered as competitive in the global economy, the report states that a country must have high levels of productivity, high levels of return, fast and sustainable economic growth, high levels of incomes and sustainable prosperity (Martin et al., 2007).

Infrastructural development and technology adaptation are considered to be some of the most critical indicators of national competitiveness. It is believed that high-quality

infrastructure reduces the effect of distance between regions, with the result of truly integrating the national market and connecting it to markets in other countries and regions (Martin et al., 2007). According to Martin et al. (2007), the adoption of ICTs by a country is also seen as allowing for a rapid and free flow of information and knowledge resulting in increased overall economic efficiency by helping to ensure that decisions made by economic actors take into account all available relevant information.

Escobar (1996), and Morse and Fraser (2004) see the notion of global competitiveness as a means of enforcing Western principles of neo-liberalism. The authors argue that the concept of global competitiveness is based on liberalization principles of free markets, deregulation and privatization. They then see the global competitiveness index as a tool designed to police the implementation of liberalization policies in developing countries and protect prevailing hegemonic interests of rich nations. Cammac (2006) agrees that global competitiveness is key to the maintenance and reproduction of capitalist hegemony within the advanced capitalist countries themselves. The author states that global leaders believe that the disciplinary forces that global competitiveness will unleash are vital to the continued sway of capital over labour in their own economies, and to the continued pressure on capital to seek to be ever more competitive.

Secondly, post-development scholars question power relations informing the global competitiveness rhetoric. Escobar (1996) raises questions of power such as: who defines and measures global competitiveness, and who benefits from these definitions? According to Fraser and Morse (2004) the very idea of a few Western countries in exclusive economic clubs creating global development standards applicable to all countries and interpreting and presenting development data reinforces the modernization view that the West is better than the developing world. From this perspective, Blaikie (2000) sees the notion of global competitiveness as a step back to a time when the role of the West to set agendas and define the world's goals was unquestioned. Fraser and Morse (2004) conclude that this tends to cast development as tyrannical because it imposes a view of the world that is at best misguided and distorted.

Based on the notion of global competitiveness, Rwanda's national ICT policy states that;

> The GOR is also aware that the deployment of ICTs to support socio-economic development by a number of countries will be creating new winners and losers, within the new emerging global economic order to be dominated by information and knowledge economies (IKEs). And the gap between these new winners and losers is likely to be much larger than the development gap that now exists between the advanced nations and the under-developed nations. Rwanda is at risk of being further marginalized if she failed to embrace these technologies to transform her economy and society," (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 8, section 8).

In the above citation, Rwanda's national ICT policy seems to view the adoption of ICTs by the country within the context of global competitiveness. To begin with, the country's policy is confident that the deployment of ICT to development will inevitably be implemented "by a number of countries," thereby suggesting a global perspective. Rwanda's strategy moves on to express caution that the global ICT hype is likely to create "new winners and losers," a position suggesting a similar view as the DOI that if left unabated, ICTs can "serve to worsen and entrench the spiral of poverty which already exists in many communities and countries, (DOI, 2001: 5). Typically, Rwanda's caution on the ability of ICTs to perpetuate global inequality is followed by prescribing adoption of ICTs to avoid marginalization. The policy declares that "Rwanda is at risk of being further marginalized if she failed to embrace these technologies to transform her economy and society." This declaration, like Rwanda's modernization rhetoric tends to frame adoption of ICTs as inevitable for the country's global competiveness. Consequently, the global competitiveness rhetoric in Rwanda's national ICT policy tends to imply that Rwanda can only be seen as developed in comparison with other countries and on the basis of the adoption of modern technologies. This can encourage a view of development as the emulation of foreign development paradigms and the adoption of Western technology. Such a perception tends to denigrate local development perspectives as inferior to 'global' development trends. This can lead to passive adoption of the international ICT for development paradigm on Western terms. Ishemo (2004) argues from a post-colonial perspective that because the ICT for development paradigm is framed within the agenda of neo-liberalism, passive adoption of the ICT for development paradigm on Western terms promotes the expansion of capitalism and the social inequalities that

are inherent in capitalism in Africa. This can result in the concentration of ICT ownership in Rwanda in the hands of a few foreign corporations. The proliferation of foreign corporations in Rwanda's ICT sector can result in the imposition of Western culture as the internet is used for one-way transmission of western information to Rwandans (Ishemo, 2004).

Rwanda's global competitiveness rhetoric persistently creates binary representations of global as superior and local as inferior. The adjectives used to describe a globally competitive ICT-based economy make interesting comparison with words used to depict Rwanda's development challenges. The policy states that;

> "The GOR through the *Vision for Rwanda* is committed to the establishment of a globally competitive, *diversified* and balanced economy that is driven by information, knowledge and skills --- an economy with an ICT-intensive modern industrial sector; a modern, efficient and competitive agricultural sector; and a vibrant ICT-driven, valued added service sector capable of serving as the engine for accelerated economic growth and development," (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 13, section 23).

In the above excerpt, ICTs are once again framed as playing an economic role of driving a "globally competitive, diversified, and balanced economy." Consequently, a globally competitive economy is glorified and described as "modern," "efficient," "competitive" and "vibrant."

On the other hand, Rwanda's national ICT policy recommends the use of ICTs to address the country's development challenges which are described in terms directly opposed to the glorified globally competitive economy as follows:

> The GOR also recognizes the need to target these (that is ICT) policies, strategies and plans at addressing the key developmental challenges facing Rwanda –and these include:
> • Diminishing agricultural productivity
> • Narrow economic and Export Base
> • Poor Institutional Capacity
> • Public Debt Burden
> • Extreme land fragmentation, diminishing land resources and per capita arable land.
> • Rapid population growth and high population density
> • A low level human resource development
> • Underdeveloped and under-funded social infrastructure and services
> • A weak private sector
> • Long and costly distance from the Ocean

- Social and Economic Factors of the Genocide
- Low capacity in World Trade Organization (WTO) negotiations on General Agreement on Trade in Services (GATS) (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 10, section 15).

The use of descriptive words such as "narrow", weak and "poor" to describe Rwanda's development challenges is in sharp contrast with the ICT-based globally competitive economy described as "diversified," "balanced," "vibrant" and "efficient." Thus the representation of ICT as a tool for global competiveness seems to further perpetuate the "othering" of Rwanda's existing development strategy as weak and incompetent compared to the ICT paradigm portrayed as balanced and efficient (Biccum, 2005). This denigrates Rwanda's local development paradigm and further reinforces the modernization view of western development perceptions as superior thereby creating top-down development relationships between developed and developing countries.

Suffice to say that like the UNDP and USAID ICT discourse, the causes of poverty cited by Rwanda's national ICT policy represent poverty as caused by a combination of natural factors including; extreme land fragmentation, diminishing land resources and per capita arable land, rapid population growth and high population density , as well as long and costly distance from the ocean. The policy also represents poverty as caused by inefficiency by chronicling factors such as; diminishing agricultural productivity, narrow economic and export base, poor institutional capacity, public debt burden, low level human resource development, underdeveloped and under-funded social infrastructure and services and a weak private sector. Representing poverty as caused by a combination of natural challenges and inefficiency tends to confine the solution for poverty within the natural sciences and expert domain thereby promoting a technical view of development (Escobar, 1995). A technical perception of development diverts attention from unequal socio-economic relations between developed countries that tend to cause poverty in developing countries and puts the blame for 'underdevelopment' on Rwandans (Escobar, 1995). As a result, Rwanda's emulation of the UNDP and USAID perception of poverty tends to promote a technical view of poverty which legitimizes the use of ICTs to impose Western expert knowledge on Rwandans at the expense of local knowledge seen as unscientific (Bicuum, 2005; Escobar, 1995).

The policy seems to silence potential debate on causes of poverty in Rwanda by stating that, "Rwanda, the GOR believes, is a nation fully aware of its problems and challenges as well as its potentials and capabilities to address these problems and challenges to facilitate the advancement of its society, economically, socially and culturally," (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 10, section 16). The assertion that the country is "fully aware of its problems and challenges," tends to pre-empt alternative ways of seeing poverty in Rwanda thereby obstructing local communities from defining the country's development challenges from their own perspectives. This tends to divert attention from questioning the framing of the very development goals that ICTs are being integrated into thereby enabling the international ICT for development discourse to dominate the definition of Rwanda's development problems and solutions (Escobar, 1995).

The use of ICTs for Rwanda's global competitiveness is seen as creating development opportunities through the creation of local and international employment opportunities as stated in the policy that the country aims to "develop a competitive high value-added service sector, to generate employment and serve as an engine for accelerated development and economic growth with the potential to develop into a business-service hub for the domestic economy, the East Africa sub-region and beyond" (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 13, section 27). This view tends to echo the "global positioning" rhetoric commonly found in the DOI (2001) and Leland Initiative (1996) by representing the positioning of Rwanda as a regional and global leader in the ICT sector as opening up the country to global markets and employment opportunities.

Rwanda's national ICT strategy emphasizes prospects for increased service sector exports as a result of the use of ICTs for competitive global positioning. The policy points out that, "The GOR further believes that Rwanda, by extensively deploying ICTs to support the development of its service sector can serve as the Dubai of the region and provide ranges of off-shore, banking and financial services to business community in the region and beyond," (Rwanda NICI policy, 2000: 23). The ambition to use ICTs to transform Rwanda into "the Dubai of the region," through global

exportation of ICT is awash in all of Rwanda's four NICI plans (see NICI Plans 2001-2005; 2006-2010; 2011-2015, 2016-2020).

The study finds Rwanda's rhetoric for the use of ICTs to create global development opportunities for Rwandans questionable because it rests on two problematic assumptions. Firstly, the supposition that ICTs can create equal development opportunities for developed and developing countries. Rwanda's national ICT policy adamantly states that, "The GOR believes that Rwanda is equally placed to take advantage of these technologies to facilitate her socio-economic development process," (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 10). The study argues that Rwanda may not necessarily be "equally placed" to benefit from the use of ICT for global trade because of the existence of deep-seated socio-economic and political inequalities between developed and countries that tend to adversely affect the participation of developing countries in global socio- economic activities (Crush, 1995).

Equally problematic an assumption made by Rwanda's global competitiveness narrative is the belief that by being a leader in the provision of ICT services, the country can create a pool of IT- skilled citizens capable of attaining middle-income status. This view neglects the existence of power inequalities within Rwandan society that tend to adversely affect poor people's access to technology leading to unequal access to opportunities created by the country's information and knowledge based economy (Ansoms, 2002). Thus despite receiving various accolades as a leader in the use of ICT for development in Africa , Rwanda is ranked by the United Nations Development Programme's Human Development Index on Sustainability and Equity in the low human development category occupying 167th position out of 187 countries. According to the report, when the Human Development Index factors in inequality, Rwanda's development ranking further drops to second least developed country in Sub Saharan Africa after Guinea (United Nations Development Programme's Human Development Index on Sustainability and Equity, 2011: 4). It must, however, be noted that the UNDP measurement systems are themselves limited because they tend to represent the dominant Europe- American view of development which is not necessarily similar to that of developing countries (Koeble and Lipuma, 2008). Despite this, the study however, argues that even based on the UNDP's

problematic development index, Rwanda's development ranking indicates that the country's prestigious technological status has not translated into a corresponding competitive position in terms of human development. This scenario disputes the assumption made by Rwanda's national ICT policy that positioning the country as a global leader in the provision of ICT services can catapult the poor into middle-income status. Thus it can be argued that the adoption of the international notion of global competitiveness in Rwanda's ICT discourse can result in the creation of an ICT paradigm that does not consider the existence of power inequalities influencing access to the internet and its use for knowledge production by poor people.

6.3.3 Technical representation of poverty reduction

The study observes prevalent representation of development by Rwanda's national ICT policy as speedy technical take-off, a view akin to the USA Marshal plan. Rwanda's national ICT policy states that; "The GOR acknowledges that the level, scale and speed of the socio-economic development envisaged in the *Vision for Rwanda* cannot take place without the necessary modern physical infrastructure: roads and general utilities; social infrastructure; telecommunications and communication infrastructure. The GOR is therefore committed to the rapid development, upgrade, improvement and deployment of the necessary infrastructure in all key areas. In this regard, the development of a reputable geographic information infrastructure will prove an important asset to support the development of the physical infrastructure (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 20).

The above quotation uses words such as "speed" and "rapid" to evoke a sense of urgency for the creation of physical infrastructure for Rwanda's development process. In the same vein, the policy also recommends speedy acquisition of technical knowledge further stating that, "The Government as part of its strategy in this area will be encouraging partnership, collaboration and linkages between local R&D Institutions -and foreign Centers of Excellence to speed up the process of knowledge and know-how transfer to Rwandans (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 20). The implementation of ICT for development therefore prioritizes "rapid" infrastructure development and "speed" "transfer" of knowledge from "foreign Centers of Excellence" to Rwandans.

The rhetoric stressing the need for swift transfer of technology and technical knowledge to Rwanda tends to encourage a view of development as swift technicalization of Rwandan society and further imply the need to urgently rescue Rwandans from lack of technology (see Escobar, 1995). In addition, by describing institutions specializing in ICT as "foreign Centres of Excellence," Rwanda's national ICT policy seems to perceive foreign knowledge as superior and foreign institutions as repositories of legitimate development knowledge (see Escobar, 1995).

Urgent technicalization is also emphasized in Rwanda's national ICT Plan (2005) where the acquisition of ICT skills in Rwandan society is frequently expressed as a 'fast-track' programme. The plan proposes to "fast track Universities and Colleges to launch the implementation of ICT programmes by 2002" (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 110). It specifically recommends "A Fast-Track ICT Training Programme" for the National University of Rwanda (NUR) and the Kigali Institute for Science, Technology and Management (KIST) and other interested ICT training institutions and establishments" (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 129).

The need to "Fast-Track Government Ministries and PSOs to implement their noncritical computer-based applications, information and database systems by 2003" is also underscored (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 133). Consequently, the 'fast-track' mentality reinforces the view of Rwandans as in need of urgent rescue from ignorance. This view is problematic because it is based on modernization theories of development that see the poor as ignorant and incapable of contributing to development policy. Such a view promotes the exclusion of Rwandans from the creation of development policy resulting in the imposition of foreign development models on Rwandan society. Furthermore, advocating speedy technicalization promotes hasty implementation of the ICT for development paradigm without considering the relationship between ICTs and poverty reduction in Rwanda (see Kivunike, 2007; May and Adare, 2011). As a result, the technical rhetoric in Rwanda's national ICT policy can promote a focus on quick ICT spread resulting in the Government of Rwanda missing the link between ICTs and their use for poverty reduction purposes such as facilitating the production

of poor people's knowledge to enable the poor to define development according to their needs (Quarry and Ramirez, 2009).

Rwanda's national ICT policy also perceives computer literacy as synonymous with literacy, a view that tends to portray local communities as illiterate due to lack of computer skills. The country's e-strategy points out that the creation of an information and knowledge based economy in Rwanda entails creating , "an economy based on a literate society with a high proportion of computer literate" (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 15, section 38). Thus a literate society is seen as one with "a high proportion of computer literate" thereby implying that lack of computer literacy is synonymous with illiteracy. This tends to reduce knowledge to technical know-how and further suggest that technical knowledge constitutes legitimate development knowledge (Kothari, 2007, Van der Velden, 2006). As a result, the representation of development knowledge as technical knowledge promotes top-down transfer of foreign technical knowledge to Rwandans who are portrayed as illiterate, a situation encouraging the exclusion of local knowledge in Rwanda's information and knowledge-based economy.

6.3.4 Poverty reduction as Privatization

Rwanda's national ICT policy also tends to promote a perception of privatization as leading to development. According to the country's national ICT policy, "The GOR recognizes the critical role that the private sector can play as a key partner in the process of moving Rwanda into an information and knowledge economy." (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 19, section 55). As with the ICT for development paradigm, the private sector is "recognized" and described as "critical" and "key" for development indicating that Rwanda takes the role of the private sector in development for granted.

The framing of the role of the private sector in Rwanda's development as "critical" is closely linked to telecommunications infrastructure development in the country. Subsequently, Rwanda's national ICT policy points out that,

> "Apart from its commitment to facilitate the private sector through the creation of the necessary enabling environment and putting in place the necessary policy programmes, and incentive packages, the Government is

> further committed to the creation of a stable economic and investment climate that will assist both domestic and foreign private sector organizations in the development of: the physical telecommunication and communications infrastructure and other ICT infrastructure; information resources and systems "infostructure" to support the activities of various sectors of the economy as well as in the development of human resources in ICT and other skill areas required by the information economy; and in the mobilization of financial resources and other technological resources to aid the process of developing and exploiting the opportunities of the information economy, "An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 19, section 56).

The above quoted passage repeatedly uses the word "necessary" to portray the creation of an "enabling environment" for the private sector as compulsory for development. In addition, the policy does not explain what the creation of a "necessary enabling environment" entails implying that the creation of an enabling environment for the private sector is common sense (see Escobar, 1995). The policy then refers to the need to offer "incentive" packages to the private sector thereby implying that the "necessary" policies for creating an "enabling environment" are liberalization policies. Privatization and the adoption of liberalization policies is therefore seen by Rwanda's national ICT policy as common logic for promoting telecommunications infrastructure development leading to development. Consequently, privatization is represented as aiming "to aid the process of developing and exploiting the opportunities of the information economy". As in the DOI and Leland Initiative, privatization is framed as "aiding" poverty reduction by making the "opportunities" of the information and knowledge based economy available to everyone.

The portrayal of private sector investment as "aid" tends to conceal the profit-making motive for private sector investment in Rwanda thereby making it possible for foreign investors to exploit Rwandan markets and labour in the name of poverty reduction (Escobar, 1995). Ishemo (2004) further observes that the penetration and takeover of public enterprises by large foreign capital has caused the consolidation of the dictatorship of the market in the media. As a result of liberalization and commercialization of the media, Ishemo (2004) observes that access to some media is based on the ability to pay resulting in the exclusion of the poor who do not have the means to pay. This view is supported by the fact that despite attracting enormous

direct foreign investment in telecommunications infrastructure development from Nokia, the Grameen Foundation and donors including the DFID and The World Bank, [50] as well as opening up to various private internet service providers such as MTN Rwanda, Tigo, Airtel, Broadband Systems Corporation, New Artel and Altech Stream[51], Rwanda's internet is rated by the International Telecommunications Union (ITU) as having the most expensive internet services in East Africa.[52] Thus liberalization and privatization of Rwanda's telecommunications sector has not promoted universal access to the internet as access to the internet has remained very expensive in Rwanda. Ishemo (2004) further states that with a few exceptions, the commercialization of the media has led to the promotion of a commodified model of content that is dependent on external content. Such a situation can promote the dominance of foreign commercial content on Rwanda's internet thereby making it very difficult for local communities' knowledge to count as legitimate development knowledge (Ishemo, 2004).

6.3.5 Poverty reduction as enhancement of access to basic services

Rwanda's national ICT policy also tends to create the view of ICTs as enabling access to basic services. The policy states that, "The GOR acknowledges the key role that ICTs can play in educational delivery and training and the need for ICT training and education in schools, colleges and universities. The Government further acknowledges, the role that ICTs can play in literacy education and need to improve the educational system as a whole (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 18, section 47). This passage represents ICTs as enabling delivery of education, training, and literacy education thereby emphasizing the role of ICTs in delivering education services to Rwandans. On this basis, the narration then goes on to propose "ICT training and education in schools, colleges and universities." The policy is silent about the causes of lack of education in Rwanda. The identification of the role of ICTs as that of educational "delivery" followed by recommendation for adoption of ICTs in Rwanda's education sector tends to represent lack of education as caused by distance or lack of access, a

[50] See www.ceprc.ca/africa/africa-e.hmtl
[51] See allafrica.com/stories/201207140062.html
[52] See http://www.techmtaa.com/2011/11/04/itu-kenya-and-rwanda-has-the-most-expensive-internet-services-in-east-africa

view commonly found in the DOI (2001) and Leland Initiative (1996). The representation of lack of education as caused by lack of access tends to justify a technical solution to lack of education in Rwanda (Biccum, 2005; Escobar, 1995). This tends to consistently technicalize poverty and ignore power inequalities influencing access to education in Rwanda. The technicalization of lack of access to education in Rwanda can therefore divert attention from addressing socio-economic factors influencing access to education in the country resulting in the exclusion of poor communities from Rwanda's ICTs-based economy.

The representation of poverty as caused by lack of access is also found in Rwanda's e-governance rhetoric where the policy recommends the use of ICTs to reduce distance between government and citizens. The policy states that, "The GOR acknowledges the crucial role that ICTs can play in the delivery of Government Services; in bringing government closer to the people; and in facilitating the implementing of the Government's decentralization and villagization policy to support the activities of the local administrative units (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 18, section 49). The idea of using ICTs to bring "government closer to the people" indicates a similar view as the DOI and Leland Initiative's problematic perception of poverty as caused by lack of access due to remoteness. In this regard, e-governance is portrayed as serving the purpose of first and foremost facilitating, "the delivery of Government services." Use of the word "delivery" in this quotation creates the impression of the Government of Rwanda conveying services to passive recipients thereby creating top-down sender-receiver relationships in Rwanda's e-governance rhetoric. As a result, e-governance is portrayed in the same top-down fashion as in the DOI and Leland Initiative where e-governance is framed as the use of ICTs to deliver government information and services to remote communities. This view of e-governance is problematic because it neglects the use of the internet for two-way communication between Rwandan communities and the Government of Rwanda capable of facilitating the participation of local communities in the creation of Rwanda's development policy.

The study also observes the presence of participatory language suggesting the use of ICTs for participation in the above quoted passage. Following prioritization of the use

of ICTs for top-down delivery of government service, the narration quoted above proceeds to evoke a participatory view of e-governance by referring to the role of ICTs "in bringing government closer to the people; and in facilitating the implementing of the Government's decentralization and villagization policy." The idea of "bringing government closer to the people," tends to evoke development participatory communication theory's view of the use of the internet as enabling interaction between government and local communities (Servaes, 2006). At the same time, the concept of "decentralization and villagization" seems to portray a bottom-up perception of development whereby development experts handover authority to local communities and enable then to define and control development processes (see Chambers, 1992). The motive for "bringing government closer to the people" and "decentralization and villagization," however, is expressed as "to support the activities of the local administrative units." By defining the use of ICTs for decentralization as aiming to "support" the activities of local administrative units, Rwanda's national ICT policy seems to give ICTs a passive administrative role of supporting development activities. As a result, the rhetoric seems to portray the use of ICTs for "decentralization" as that of making local communities accessible to local administrative units. In this regard, Rwanda's national ICT policy is likely to promote the use of ICTs to facilitate top-down control of local communities by government administrative structures in the name of "decentralization." This view is supported by the post-development view that very often, so called bottom-up approaches such as "decentralization," and "participation" serve the purpose of tightening control on local communities by making villagers closely accessible to development institutions (Escobar, 1995; Cornwall and Brock, 2006).

Finally, the study observes that despite using language suggesting participatory approaches to the use of ICTs for development such as "decentralization", and "villagization," there is very little participatory rhetoric in Rwanda's national ICT policy. For instance, in the following passage the policy makes reference to the "abilities and capabilities" of Rwandans in a manner that brings to mind Sen's (1999) belief which is widely quoted by development participatory communication scholars that development must be about enhancing poor people's innate capabilities (see Mefalopulous, 2008; Quarry and Ramirez, 2009, Dagron, 2003). In the same vein, Rwanda's national ICT policy states that "The *Vision for Rwanda* also aims at

enhancing the pride and confidence of the people of Rwanda in their abilities and capabilities to develop Rwanda into a prosperous nation that is at peace with itself territorially and ethnically (An Integrated ICT-led Socio-Economic Development Policy and Plan for Rwanda 2001 – 2005: 11, section 18). The study however observes that despite this once-off reference to Rwandan "abilities and capabilities" the policy consistently represents Rwandans as backward and illiterate due to lack of technology and technical skills. This contradiction in the discourse in Rwanda's national ICT policy tends to suggest that the country's strategy perceives of Rwandans as passive recipients of technology and knowledge and once again render the strategy's seemingly participatory rhetoric questionable.

In addition, the country's strategy is silent about core notions of development participatory communication theory such as ICT ownership and control by local communities (see Quarry and Ramirez 2009, Servaes et al 2006). This silence which was also observed in the DOI (2001) and Leland Initiative (1996) leaves a gap in the country's policy. As stated earlier, the pervasiveness of the liberalization and privatization discourse in Rwanda's ICT policy, however, tends to promote ICT ownership by large foreign investors and a few local elites resulting in the dominance of foreign and elite ideology on Rwanda's internet-based development knowledge production platforms.

6.4 Conclusions

Rwanda's national ICT policy tends to repeatedly create binary representations of development based on the Oriental notion of Western superiority and 'Third World' inferiority (see Said, 1978). Firstly, the modernization rhetoric in Rwanda's national ICT policy tends to represent adoption of ICTs as leading to the creation of a "new" information and knowledge based economy while representing Rwanda's agricultural-based development paradigm as old-fashioned. The leapfrog allegory used in Rwanda's modernization rhetoric tends to portray ICTs as moving Rwanda's economy forward from "backwardness" (see Said, 1978) thereby evoking binary representatives of developing countries as backward and Western technology as moving them forward. The representation of Rwanda's subsistence based agriculture economy as "industrially weak" tends to equate lack of industrialization with

weakness and suggest that Western development models based on industrialization are superior.

Secondly, binary representations of development are also commonly found in the global competitiveness rhetoric in Rwanda's national ICT policy. The policy's global competitiveness rhetoric rests on the assumption that Rwanda can only be seen as developed in comparison with other countries and on the basis of the adoption of modern technologies. This tends to represent Rwanda's local development model as inferior to foreign paradigms that are based on modern technology. Furthermore, the representation of ICTs as tools for global competiveness tends to perpetuate the "othering" of Rwanda's existing development strategy as "weak" and incompetent compared to the ICT paradigm portrayed as "balanced" and "efficient" (Biccum, 2005).

Thirdly, Rwanda's technicalization discourse tends to create binary representations of development whereby local communities are portrayed as illiterate on the basis of lack of computer skills while technical know-how is depicted as emanating from "foreign centres of excellence." The binary representations of development found in Rwanda's national ICT policy collectively denigrate local knowledge by portraying Rwanda's economy as weak and backward, and depicting Rwandans as ignorant. On the other hand, the portrayal of the ICT for development discourse emanating from the West as modern, efficient and balanced tends to glorify Western knowledge as superior thereby imposing western development knowledge on Rwanda's development policy.

Chapter 5 found out that the ICT for development discourse found in UNDP's DOI strategy (2001) and Leland Initiative (1996) persistently represents globalization as involving the use of ICTs to transfer expert information, knowledge and markets from developed countries to developing countries, a view promoting the modernization view of Western superiority. The study therefore concludes that the influence of UNDP and USAID ICT for development discourse on the creation of Rwanda's national ICT strategy resulted in the replication of the modernization discourse that sees other countries as less developed on the basis of lack of Western technology (Escobar, 1995). This can create top-down development communication relationships

between Rwanda and developed countries resulting in the dominance of Western information on Rwanda's internet-based knowledge production models as local knowledge is seen as inferior.

The study also observes the dominance of an economic rhetoric in Rwanda's national ICT policy that tends to emulate the UNDP and USAID neo-liberal discourse. The policy's modernization discourse frequently describes development in economic language such as "accelerated economic growth," "wealth creation," and stresses modernization of the economy and economic global competitiveness. The global competiveness and privatization rhetoric in Rwanda's national ICT policy goes on to frame economic development from a predominantly neo-liberal perspective by emphasizing use of ICTs to enable access to global markets and employment opportunities and generally recommending liberalization as a "common sense" approach to ICT for development. Consequently, Rwanda's national ICT policy produces an economic view of development that is based on neo-liberalization's faith in free markets and deregulation. The dominance of an economic perception of development in Rwanda's nation al ICT policy tends to frame the role of the internet in development as an economic one thereby neglecting critical social and political functions of the internet such as its use for the production of local development knowledge capable of defining development from poor people's perspectives (Dagron, 2003).

The study observes that the economic and technical representation of ICT for development in Rwanda's national ICT strategy broadly tends to neglect the role of power in the use of ICTs for development by representing ICTs as enabling equal access to global markets, and employment opportunities and portraying access to ICTs and the acquisition of ICT skills as leading to nationwide middle-income status. In Chapter five, the study found out that the DOI (2001) Leland Initiative (1996) tend to espouse a liberalization and technical discourse that portrays poverty as caused by inefficiency and natural causes thereby neglecting the existence of power inequalities found in society that affect the participation of the poor in development processes. Consequently, the neglect of power inequalities influencing access to the country's ICT-based economy by Rwanda's national ICT policy can make it very difficult for the poor to own ICTs and control their content (see Servaes, 2006). This can promote

the proliferation of large foreign corporations and a few local elites in Rwanda's ICT sector resulting in the dominance of western and elitist ideology on Rwanda's internet at the expense of poor people's development perspectives (see Ishemo, 2004).

The study therefore concludes that binary representations of development by Rwanda's national ICT policy, and the economic portrayal of the role of ICTs in development as well as rampant neglect of power in Rwanda's ICT discourse collectively tend to promote the exclusion of local, especially poor people's knowledge from Rwanda's internet-based development paradigm. This view is supported by the study's finding that there is scanty and ambivalent 'participatory' rhetoric in Rwanda's national ICT policy thereby suggesting down-playing of participation and further implying a top-down representation of the use of ICTs for development communication.

The next chapter examines implications for the influence of Rwandan national ICT for development discourse by international development agencies on Rwandan and African poverty reduction strategies.

Chapter 7: Implications for the influence of international ICT for development discourse on African internet-based development communication policies.

7.1 Introduction

Chapter 5 of the study illustrated the translation of development participatory communication theory into the ICT for development policies of the UNDP and USAID thereby answering the first question of this research. The study found out that international development agencies tend to consult academics in the formulation of development policy (Haas, 1992). The research also found out that the theories purveyed by academics or epistemic communities tend to represent the material interests of developing countries that house and fund renowned academic institutions hence development theories are not neutral (Escobar, 1995). Although the influence of development theories purveyed by academics on the creation of international development policy is not absolute, Chapter 5 observed that academics tend to influence international development policy significantly by identifying interests and framing issues for collective debate, thereby influencing subsequent negotiations and bringing about preferred outcomes to the exclusion of others (see Escobar, 1995; Cornwall and Brock, 2006). Subsequently, Chapter 5 analyzed the influence of development participatory communication theory on the ICT for development discourse contained in the UNDP and USAID ICT for development policies, the DOI (2001) and Leland Initiative (1996) respectively. The study found that the DOI (2001) and Leland Initiative's (1996) framing of the use of ICTs for poverty reduction is extensively influenced by development participatory communication theory.

Five major influences were observed. Firstly, the policies' portrayal of ICT as "enabler" of globalization and development, and secondly, their depiction of liberalization as an integral component of the globalization, ICT and development echoed the ICT discourse within development participatory communication theory. Thirdly, the DOI (2001) and Leland Initiative's (1996) representation of the use of ICTs to reduce geographical isolation as capable of leading to development, and fourthly, the portrayal of the role of ICTs in development as that of increasing efficiency and productivity mirrored the discourse contained in development

participatory communication theory. Lastly, akin to development participatory communication theory, the study observed that the UNDP and USAID ICT for development policies perceive the use of local languages to provide relevant local content to poor communities as leading to development. The research found that these five prominent themes in the DOI and Leland Initiative are framed around the belief that developing countries must depend on global markets, Western technology and expert technical knowledge to attain development, a view suggesting the globalization of development. Chapter five then argued that the recurrent representation of globalization as involving the use of ICTs to transfer expert information, knowledge and markets from developed countries to developing countries promotes the modernization view of Western superiority and 'Third World' inferiority (Biccum, 2005). In Chapter 3, the literature review found similar problematic binary representations of development by development participatory communication theory which tended to promote the perception of the use of the internet for development as that of transferring development knowledge from developed to developing countries.

In Chapter 6, the study proceeded to trace the influence of the UNDP and USAID ICT for development discourse on the conceptualization of Rwanda's national ICT policy. The chapter found that the UNDP and USAID were able to influence the discourse within Rwanda's national ICT policy through the provision of financial and technical aid (Escobar, 1995). The study also observed that international ICT for development experts who are seen from a post-development view as agents of the dominant international development discourse (Kothari, 2005) also played a leading role in the creation of Rwanda's ICT policy thereby compounding the influence of the international ICT for development discourse represented by the UNDP and USAID.
Analysis of the rhetoric contained in Rwanda's national ICT policy found that the main themes in the country's strategy collectively create binary representations of development based on similar Oriental notions of the superiority of Western knowledge and technology and 'Third World' inferiority as espoused by the USAID's Leland Initiative (1996) and UNDP's DOI (2001) (see Said, 1986; Escobar, 1995). Furthermore, the study also observed that the discourse within Rwanda's national ICT policy tends to create an overarching economic portrayal of development that emulates the Leland Initiative (1996) and the DOI's (2001) globalization and liberalization discourse by representing ICTs as tools for enhancing the country's

economic global competitiveness. The dominant economic perception of ICT for development in Rwanda's national ICT policy tends to encourage total neglect of the use of the internet for participatory communication as ICTs are primarily seen as tools for commerce and national economic growth. Consequently, Chapter 6 argued that the denigration of local knowledge combined with the commercialization of development in the framing of Rwanda's national ICT policy can promote the neglect of local knowledge on Rwanda's internet as local knowledge is portrayed as backward, and the internet is seen as primarily a tool for e-commerce (Escobar, 1995).

Chapter 6 also found rampant neglect of power in the economic, technical and privatization rhetoric in Rwanda's national ICT policy. The research argues that the neglect of the existence of power inequalities capable of adversely affecting the participation of poor people in Rwanda's ICT-based economy can promote the dominance of developed countries' knowledge and that of Rwanda's elite on Rwanda's internet as ICTs are owned and controlled by multinational corporations in conjunction with Rwanda's elite (Escobar, 1995, Crush, 1995; Ishemo, 2004).

This chapter now looks at implications for the influence of the international ICT for development discourse represented by the UNDP and USAID on African internet-based development communication strategies. As stated in Chapter 4, the study acknowledges that one of the limitations of the case study approach is that its findings cannot be extended to other settings (Yin, 2003). Nevertheless, the study argues that African countries share more or less the same historical experiences such as a common colonial past and shared neo-colonial experiences which tend to commonly affect their position in international relations (Escobar, 1995). On this basis, the study postulates that implications for the influence of the international ICT discourse on Rwanda may possibly be felt in other African countries whose national ICT policies are also influenced by the international ICT discourse.

Based on the study's findings that the influence of the UNDP and USAID ICT discourse on the conceptualization of Rwanda's national ICT policy led to a tendency for the rhetoric contained in the country's strategy to denigrate local knowledge, commercialize ICT for development and neglect power inequalities influencing development, the study argues that the influence of the international ICT for

development discourse on the conceptualization of African national ICT policy can have far reaching consequences for African internet-based development communication policies. This includes; lack of cultural autonomy, failure by African Governments to see the link between the internet and participatory communication, and lack of acknowledgement of deep-seated power inequalities influencing access and use of the internet for development communication.

7.2 Implications for the influence of the international ICT discourse on Rwandan and African development communication policies

7.2.1 Lack of cultural autonomy

From a post-development perspective, the study argues that the extensive influence of the international ICT for development discourse on Rwanda's national ICT policy can threaten Rwandan and African cultural autonomy. Post-development scholars such as Escobar (1995), Biccumm (2005), Kothari (2005), and Parfitt (2002) argue that the exercise of ideological influence by developed countries in developing countries bears striking similarities with nineteenth-century European imperialism. The scholars argue that in the imperialistic context, development was about imposing Western development policies and technological innovations on developing countries seen as 'backward' (see Escobar, 1995). There is agreement among post-development scholars that the "civilizing mission" of colonial times has continued under the current 'participatory' development era. The scholars argue that the transfer of Western notions of development by international development agencies takes the form of an imposition of those ideas on the South and such a situation stands in contradiction with the social imaginary of autonomy. For post-development scholars, autonomy means that all the institutionalised social traditions can be questioned, and the goals redefined at any time (see Kipler, 2010; Parfitt, 2002 and Sauviat, 2007). They observe that the 'West' is still in a superior position of power and thus has more means to export its imaginary, and its ideology thereby repressing local values and experiences. Post-development thinkers find this problematic and argue that autonomy has to be made a practical reality and be struggled for, and by definition cannot be imported from the outside (Sauviat 2007).

The post-development view that the exercise of ideological influence by the West in the creation of development policy in developing countries is can lead to lack of cultural autonomy in African countries is supported by prominent international development scholars such as Harrison (2004). Harrison (2004) sees the influence of donors in the creation of developing countries policies as having consequences on sovereignty. Harrison (2004, pp 25-26) defines *sovereign frontiers* as spaces in which 'different actors can work to define sovereignty in different ways,' and 'as spaces formed by the interaction of forces therein.' Unlike most definitions of sovereignty that see sovereignty in terms of geographical borders, Harrison's perception of sovereignty perceives the exercise of influence by international technical assistants in policy- making spaces of developing countries as enabling donors to access the 'sovereign frontier' of aid recipients and shape developing countries' development policy. To this extent, Harrison's (2004) perception of *sovereign frontiers* concurs with the post-development view which sees the imposition of Western development knowledge as threatening the cultural autonomy of developing countries. Based on Chapter six's observations of the extensive influence of the UNDP and USAID ICT discourse on Rwanda's national ICT policy, the international development agencies' influence on the formulation of Rwanda's strategy can be seen from a post-development view as threatening Rwanda's freedom to define and own her development communication policy (see Escobar, 1995).

The study's view that the exercise of ideological influence by the UNDP and USAID on the framing of Rwanda's national ICT discourse can result in lack of cultural autonomy is supported by a research carried out by Schmidt (2011). The author studied the relationship between Rwanda and international development agencies in 2011 and found out that although Rwanda is considered to have strong ownership of her development polices by both the Government and the donors, donors tend to influence the country's development policy through the provision of financial and technical aid.

Schmidt (2011) finds that despite Rwanda's effort to control donor influence over its development policy through its *Aid policy* created in 2006, the country's development policy continues to be influenced by key contributors to the country's budget such as the USAID, and DFID. He observes that since 45 per cent of Rwanda's national

budget is financed by donors, the country is obliged to commit to the budget support Memorandum of Understanding which stresses the need for Rwanda to implement 'sound macro-economic policies,' good governance and to live up to 'international standards.' By citing the need for Rwanda to commit to 'sound macro-economic policies,' and live up to 'international standards,' donors can be seen from a post-development perspective as using financial aid to impose neo-liberal development policies and Western development standards on Rwandans thereby infringing on the freedom of Rwandans to define development from local values and historical experiences (Escobar, 1995) .

Schmidt (2011) also finds that despite the Government of Rwanda's recent attempt to secure control over international technical assistants through its Capacity Building Fund established in 2009, there has been a tendency of international technical assistants arriving having written their own terms of reference without the government being involved in their recruitment. As a result, Schmidt (2011) argues that technical assistants tend to impose pre-conceived development goals on Rwanda in the name of capacity building, a situation weakening the country's ownership of development policy (Schmidt, 2011).

Based on the study's findings on the exercise of ideological influence by the UNDP and USAID in the creation of Rwanda's national ICT policy and Schmidt's (2011) observations of the tendency of donors to interfere with Rwanda's policy making autonomy through the provision of financial and technical aid, the study argues that the UNDP and USAID's influence on the creation of Rwanda's national ICT policy can threaten African cultural autonomy as local knowledge is seen as backward and therefore neglected in the creation of national ICT policies (Escobar, 1995). This can alienate local communities from national ICT policies as the discourse contained in African national policy narratives is informed by Western knowledge at the expense of African socio-cultural realities (Ishemo, 2004, Escobar, 1995). The alienation of Africans from national ICT policies can make it very difficult for local communities to have a say in the implementation of national ICT policies thereby promoting dependence on Western knowledge in the use of the internet for poverty reduction in Africa, a situation reminiscent of modernization and colonial times whereby development was defined by the West.

7.2.2 Lack of consideration for the use of the internet for participatory communication

The study also found out that the influence of the UNDP and the USAID on the creation of Rwanda's national ICT policy led to the dominance of a neo-liberal development discourse in Rwanda's strategy that emphasized the use of ICTs to attain economic global competitiveness. Chapter six then concluded that the influence of the UNDP and the USAID on the creation of Rwanda's national ICT policy promoted a predominantly economic perception of the use of ICTs for development. Consequently, the study concludes that the influence of the international neo-liberal ICT discourse on the creation of African national ICT policies can make it very difficult for African governments influenced by the international ICT for development discourse to perceive of ICTs as tools for participatory communication as ICTs are primarily seen as commercial tools.

The above argument is supported by the fact that although the government of Rwanda is internationally known for supporting e-commerce[53], the country has not been supporting the use of ICTs for the creation of democratic spaces in Rwanda. For starters, a report by an association of international journalists known as Freedom House reports that there are very few local on-line news publications in Rwanda and the country's media is dominated by print and radio broadcasting (see Freedom House, *Freedom on the Net 2012 - Rwanda).* The Freedom House reports that it is very expensive to establish an online publication in Rwanda hence state media that thrives on government subsidies tends to dominate Rwanda's online news content. Moreover, the Freedom House report also states that most Rwandan media outlets lack modern ICTs such as computers and digital cameras, a situation making the country's media working environment very difficult. The scarcity of electronic media outlets in Rwanda and a general lack of ICTs in Rwanda's media environment clearly demonstrate that the Government of Rwanda has not prioritized the use of ICTs to create a public sphere enabling local communities to express their development views (see Habermas, 2006).

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[53] See http://www.un.org/africarenewal/magazine/april-2011/information and http://hana.ru.ac.za/index.cfm

Although there are no laws that specifically restrict internet content or criminalize online expression in Rwanda, in practice, the government of Rwanda has consistently clamped down on the use of ICTs for the creation of democratic spaces and promoted the use of the internet for top-down communication in the media. The Freedom House reports for instance that the government of Rwanda's High Media Council responsible for regulating the country's media established an online monitoring department to screen web content in the country in 2012 (see Freedom House, *Freedom on the Net 2012 - Rwanda).* According to Freedom House, the Media Council has been known to contact websites to request the removal of certain information. The Freedom House report also cites rampant instances of opposition sites being blocked. Although the Government of Rwanda has often cited the 1994 genocide as a pretext for controlling online content, Pottier (2002: 202) observes that ultimately the government of Rwanda has managed to attain a 'monopoly on knowledge construction' in the country through the suppression of competing narratives and alternative voices within Rwanda. Consequently, far from linking ICT to participatory communication, the Government of Rwanda seems to promote state monopolization of the use of ICTs in the communication sector. This tends to promote top-down development communication tendencies as online state media is used to send information from the Government of Rwanda to citizens, a situation emulating the UNDP and USAID ICT for development discourse's linear tendencies.

It must however be noted that despite the Government of Rwanda's neglect of the use of ICTs for political participation, Freedom House reports that the country's blogosphere has evolved into a vibrant platform for expression, largely consisting of youth who write on a variety of topics, including their political views (Freedom House, *Freedom of the Press 2012 – Rwanda).* According to Freedom House, Facebook is also emerging in Rwanda as a popular site for online interaction and the social media revolution has empowered Rwandans to discuss issues that were formerly taboo and not open to public discussion due to fears of persecution (Freedom House, *Freedom of the Press 2012 – Rwanda).* Freedom House also states that Rwanda's President Paul Kagame is an active supporter of these social networks as he occasionally engages in discussions with users and responds openly to issues relating to the current state of governance in the country (Freedom House, *Freedom of the Press 2012 – Rwanda).* Thus although Rwanda has not promoted the use of ICTs to

create public platforms for political debate, the emergence of social media has opened up participatory channels for local communities.

As stated earlier in Chapter 6, despite the openness of social media, power dynamics tend to influence their use for participatory communication. Freedom House points out that although the websites and blogs of opposition activists both within and outside Rwanda are more or less freely available, only opposition supporters living outside Rwanda, mainly in Europe and the United States, are responsible for most of the criticism against the government that appears on forums, websites, and blogs. Such a scenario points to the post-development view that technical access to participatory platforms does not necessarily result in the participation of local communities in communication processes as power relationships between the Government of Rwanda and Rwandans tend to hinder the participation of local communities on political websites and blogs. Besides, Ndikubwayezu, (2011) states that the Government of Rwanda has reacted to the use of social networks for political debate by urging all top government officials in Rwanda to participate in social media networks such as Facebook and Twitter, in a bid to counter the growth of international opposition voices online. Thus the Government of Rwanda tends to persistently view ICTs as channels for one-way information dissemination from Government to citizens.

Although Rwanda has a history of using traditional media such as radio and newspapers to enable local communities to debate development issues (see Barare, 2011: 2), the country has not envisaged the use of modern ICTs, especially the internet for participatory communication in its poverty reduction strategies. Rwanda's public internet and telephone access points known as telecentres have mainly been used for top-down information dissemination. According to Rwandan Telecentre Network (RTN) Chief Executive Officer Paul Barera, Rwanda's telecentres mostly serve the purpose of ensuring that farmers get the information they need to maintain sufficiently high levels of production. He cites one of the major successes of Rwandan telecenters as that of enabling Rwandan farmers to receive updates on market prices for their crops via an SMS software programme called *e-Soko* ("e-market") resulting in farmers pocketing extra cash through the elimination of middlemen (also see Africa Renewal report, 2011). In addition, Barare points out that

telecentres are also being used to impart ICT-based entrepreneurial skills to marginalized women.[54] Thus Rwanda's telecenters are perceived primarily as information centres used to provide economic information to poor communities, a position promoting top-down commercial use of the internet and neglecting the use of ICTs for participatory communication.

While Rwanda has not been very keen on the use of ICTs for participatory communication, the Government has vigorously supported the use of ICTs for commerce based on the Government of Rwanda's ambition to turn Rwanda into a regional ICT-based business hub or "the Singapore of Africa".[55] Quoting the World Bank, a report by Africa Renewal[56] reports that the prevalence of e-commerce in Rwandan business systems has made it easier faster and less expensive to operate a business in Rwanda than in most other African countries. *Africa Renewal* quotes the World Bank's "Ease of Doing Business" rankings, by which the World Bank gauges the intricacies of running a company in different countries, as placing Rwanda 58th out of 183 nations surveyed, up from 143 in 2009[57]. In 2008, the Government of Rwanda was also named East Africa's number one ICT nation by the United Nations Conference on Trade and Development (UNCTAD) based on the country's ability to use ICTs to boost national economic growth.[58] Because of the prevalence of e-commerce in Rwanda, Visa, a global payment technology company picked Rwanda out of dozens of countries as a test ground for bringing electronic payments to "frontier economies and the company started to link Rwandan shops and cash machines to its global network in 2012.[59] E-commerce is also commonly applied in Rwanda's public sector. For instance, Rwanda's ministry of transport offers SMS-based drivers' license applications and an electronic public transport ticketing system,

[54] The New Times, 30 December, 2012, "Bridging the digital divide in rural communities," available at http://www.newtimes.co.rw

[55] See http://www.un.org/africarenewal/magazine/april-2011/information technology supercharges Rwanda's economy

[56] Africa Renewal is an African magazine covering socio-economic and political issues and the cited report is available at http://www.un.org/africarenewal/magazine/april-2011/information technology supercharges Rwanda's economy

[57] Available at http://www.un.org/africarenewal/magazine/april-2011/information technology supercharges Rwanda's economy

[58] See http://hana.ru.ac.za/index.cfm

[59] http://www.economist.com/node/21548263

and the ministry of health offers various public e-health services while immigration provides an online passport processing system[60]. Overally, the World Bank reports that Rwanda's gross domestic product has grown steadily since the development of the country's ICT-based economy (World Bank Country Report, 2011). In 2010, the country's gross domestic product (GDP) is reported to have grown by 7.4 per cent, following an annual average growth rate of 7.5 per cent between 2004 and 2009 (World Bank Country Report, 2011)[61].

The above illustrations of the Government of Rwanda's support for the use of ICTs for economic activities clearly show that the Government of Rwanda has vigorously pursued a policy of supporting the use of ICTs for commercial purposes but as shown earlier on, no similar support has been given to the use of ICTs for participatory communication in Rwanda. The study therefore concludes that the influence of the UNDP and USAID on the creation Rwanda's national ICT discourse can result in lack of consideration for the use of the internet for participatory communication by promoting a perception of ICTs as tools for commerce and national economic development. Such a view can lead to monopolization of the internet by rich multinational corporations and Africa's elite and the dominance of foreign and elitist development knowledge on African internet-based poverty reduction strategies. Consequently, the poor will continue to suffer from a key dimension of poverty, social exclusion, as African national policy makers take for granted that use of the internet for e-commerce can lead to poverty reduction (Sen, 1999).

7.2.3 Lack of consideration for power

Finally, the study observes that the influence of the UNDP and USAID ICT discourse on the creation of Rwanda's national ICT policy led to general neglect of power inequalities influencing the participation of Rwandans in the country's ICT-based economy. This tends to promote a lack of consideration by the Government of Rwanda for socio-economic inequalities influencing access and use of the internet by the poor in Rwanda.

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[60] Ibib, and also see Rusuhuzwa, and Habimana (?)

[61] Available at http. //www.gfmag.com/gdp-data-country reports

The above argument is supported by observations made by a research on the ICT and Poverty Nexus by Poverty, ICT in Urban and Rural East Africa (PICTURE-Africa) in 2010 (see May and Adare, 2011). The research found out that despite the Government of Rwanda's efforts to make internet accessible to the poor through the establishment of telecentres in rural areas, access to ICTs in Rwanda, mainly depends on income, education, resources and gender (see May and Adare, 2011). According to the study, in Kenya, Rwanda, Tanzania, and Uganda, the odds of gaining access to ICTs was shown to more than double relative to improvements in income, and an additional year of education was shown to increase the odds of having ICT access by around 30 per cent (see May and Adare, 2011). Rural residence and being female was found to significantly reduce the chances of having ICT access by approximately 50 per cent as resources tend to be male controlled (see May and Adare, 2011). This view is supported by Freedom House which also reports that there is generally a wide disparity between internet penetration in Rwanda's rural areas and urban areas (see Freedom House, *Freedom on the Net 2012 - Rwanda).* According to a Rwandan daily newspaper, *The New Times*, this is mainly caused by less disposable income among people in rural areas than those in urban areas.[62] The cited socio-economic factors influencing access to ICTs in Rwanda clearly illustrate that lack of consideration for the influence of power in the framing of the country's national ICT policy is a cause of unequal access to the internet in the country. Such a situation can promote the exclusion of poor people from internet access and participation in the use of the internet for the creation of development knowledge in Rwanda.

In the same manner, disparities in actual use of the internet in Rwanda's urban and rural schools tend reflect a lack of consideration for deep seated inequalities influencing e-education in the country. Barare (2011) observes that although some schools in Rwanda's impoverished areas have accessed computers through the Government of Rwanda's ongoing One Laptop Per Child (OLPC) programme, poor communities have remained disadvantaged in the use of the internet in various ways. Some of the factors adversely affecting the use of the internet in rural areas include erratic electricity supplies and for about 90 per cent of the country's rural areas, a total

[62] The New Times, 15 August 2011, "High Cost Affecting Rural Internet Penetration," by Saul Butera, available at http.//www.newtimes.co.rw/new/index.php?1=14718qa=44168

lack of electricity, lack of proximity to computer maintenance facilities which are concentrated in the capital city of Kigali, and lack of skilled teachers (Barare, 2011). The cited factors influencing the use of the internet by rural pupils in Rwanda tend to show that despite the Government of Rwanda's ongoing efforts to make computers accessible to all Rwandan pupils, deeply entrenched socio-economic inequalities found in Rwandan society continue to adversely affect access to the internet and its use. This can perpetuate the knowledge production gap between the rich and the poor as pupils in rural schools are not at par with urban pupils in terms of access to the internet and opportunities for its use. The perpetuation of the knowledge production gap between the rich and the poor by African national ICT policies will essentially mean that even during the so called 'participation' era, development communication will continue to be a top-down affair.

7.3 Conclusion

The influence of the UNDP and USAID ICT discourse on Rwanda seems to have resulted in three main consequences, namely; lack of cultural autonomy, lack of consideration for the use of the internet for participatory communication in poverty reduction strategies due to the dominance of a commercial perception of ICT for development, and lack of consideration for power inequalities influencing access and use of the internet for development. The cited implications for the influence of international ICT discourse on Rwanda tend to perpetuate two modernization and colonial perceptions of development. That is the view that legitimate development knowledge emanates from the West and that development is predominantly an economic and top-down affair. The study therefore concludes that the influence of the international ICT discourse on the conceptualization of Rwanda's national ICT policy resulted in replication of top-down modernization tendencies capable of legitimizing the dominance of Western development knowledge and reinforcing the exclusion of local people's knowledge from African internet-based poverty reduction strategies. The next chapter concludes the study by exploring possibilities of using post-development theory to create alternative African national ICT narratives and discussing contributions made by the research as well as suggesting prospects for further research.

Chapter 8: Conclusion: Seeking alternative African national ICT policy narratives

8.1 Introduction: Arguments made in the study

This study critiqued the discourse associated with the use of the internet for poverty reduction within development participatory communication theory and analysed how this discourse is translated into international development agencies' ICT for development policies represented by the UNDP and USAID ICT for development policies namely the DOI (2001) and the Leland Initiative (1996). The research found extensive emulation of the rhetoric within development participatory communication theory by the DOI (2001) and Leland Initiative (1996). The study argued that the influence of development participatory communication theory on the framing of the international ICT for development discourse resulted in binary representations of the use of the internet for development based on modernization notions of Western superiority and 'Third World' inferiority. Equally important an influence noted by the study is the dominance of a neo-liberal portrayal of the use of ICTs for poverty reduction that neglects the role of power in internet-based development communication processes (Biccum, 2005).

The study then examined the influence of the UNDP and USAID on the creation of Rwanda's national ICT policy and found that the two international development agencies influenced the creation of the country's ICT discourse through technical and financial aid. Consequently, the rhetoric in Rwanda's national ICT policy espouses an overarching modernization and liberalization discourse which conveys similar problematic binary representations of development, neglects the influence of power in development and further promotes a predominantly commercial perception of ICT for development. Chapter 7 then argued based on these findings that implications for the influence of the international ICT discourse on Rwanda's national ICT policy include; lack of cultural autonomy, failure by African Governments to see the link between the internet and participatory communication, and lack of acknowledgement of deep-seated power inequalities influencing access and use of the internet for development communication. The existence of a pervasive Eurocentric narrative which denigrates local knowledge in the ICT rhetoric within development participatory communication

theory, international development policy and Rwanda's national ICT policy clearly shows that emulation of the international ICT for development discourse by African countries does not yield national ICT policies that are amenable to the use of ICTs for local knowledge production. There is therefore need for African countries to develop alternative national ICT for development narratives based on local values and experiences. To conclude the study, this Chapter explores the possibilities of using post-development theory to create alternative African national ICT narratives and further discuss contributions made by the thesis and prospects for further research.

8.2 Post-development theory and the quest for alternative African national ICT policy narratives

As stated in Chapter 3, post-development critiques have dismissed post-development theory for simply criticising development without offering alternatives to development (Schuurman 2000; Nederveen Pieterse 2000). According to Nederveen Pieterse (2000: 188), there is no positive programme to post-development theory, and its claims for offering ‘‘alternatives to development," is a misnomer because no such alternatives are offered.

Based on the study's findings, the study however argues that post-development theory can provide authentic alternatives to the mainstream ICT for development discourse by foregrounding and challenging underlying assumptions made by the international ICT for development discourse about the participation of poor people in development internet-based knowledge production processes. The study found out that the international ICT for development rests on the assumption that Western development information can be universalized and the influence of the international ICT for development on the conceptualization of Rwanda's national ICT policy took the form of an imposition of these assumptions on the country thereby repressing local cultures and interests (Parfitt 2002: 7). As stated in Chapter 3, a post-development view rejects the attempt by development to ‘engineer particular changes in the so-called "Third World" in order to bring about changes deemed more desirable by development experts and call for ‘a new way of changing" based on local perspectives (Mathews, 2004: 377; Andreasson, 2010). In this regard, post-development theory calls for a new political vision that protects the autonomy of political communities and requires a space for self-determination and for the capacity to control one's own destiny in the

face of external forces (Kipler, 2010). According to Sachs (2002), this demands the revitalisation of local communities. The study's findings about the capability of the influence of the international ICT for development discourse on Rwanda to pause a threat to the country's cultural autonomy suggests the need for African ICT-based poverty reduction strategies to be defined by local historical and cultural experiences in order for them to provide platforms for the participation of local, especially poor communities, in the creation of development knowledge capable of meeting their development needs and aspirations (Escobar, 1995).

The study acknowledges that a major criticisms levelled against post-development theory is its romanticising of local communities which is seen as turning a blind eye to power struggles found in local communities capable of re-producing the same inequalities that the post-development perspective is critical of (Nederveen Pieterse, 2000). Kippler (2010) however, observes that the issues at the heart of development are fundamentally political hence any attempt to move past the dominant development discourse must be inherently political. Consequently, she argues that local initiatives, although still clearly limited, play a significant role as they provide the means for reclaiming development issues and relocating them within a democratic process which might not necessarily involve the politics of the State, in order to make room for people's autonomy Kippler (2010: 32). Kippler, however, does not rule out the role of international development actors and the state in local development but she argues that existing development institutions must be transformed and this transformation ideally should involve a transfer of the power to define the problems and goals of a society from the hands of outside "experts" to the members of the society itself. The only challenge as far as Kippler (2010: 33) is concerned is to connect post-development theory to a theory of justification that does not require a foundation in a universality that undermines the project of emancipation, which is in essence plural.

Based on Kippler's (2010) model for the application of post-development theory to create development alternatives, the study argues that the creation of alternative African national ICT policy narratives needs to be entrusted to local communities taking cognisance of their plurality and diversity. The study also concurs that while other development actors such as international development agencies and the state

have a role to play, they must be radically transformed to a point where they are led by local definitions of the use of ICTs for development instead of vice -versa (also see Chambers, 1999).

8.3 Contributions made by the study

As stated in the literature review and theoretical framework section, there has not been much research conducted by African scholars to critique the development discourse, especially the ICT for development rhetoric from post-development perspectives. Most studies of African ICT paradigms tend to take an evaluation approach which concentrates on assessing access to ICTs and information as indications of development (see ECA Scan- ICT, Castells; 1996, ITU; 2008, Wilson and Young, 2008; Lewis, 2005; Dzidonu, 2002). This study has gone beyond evaluating ICT paradigms and utilized a critical discourse analysis approach to critique the use of language by development participatory communication theory, international development agencies and Rwanda's national ICT policy. The study investigated both explicit and hidden expressions of power in internet-based participatory knowledge production paradigms. This enabled the study to uncover power dynamics at play in the conceptualization of development participatory communication theories and international development policies. As a result, the study provides a more critical understanding of a significant component of the international ICT for development discourse, that is the rhetoric for the use of the internet for participatory knowledge production. By tracing the translation of participatory communication theory into UNDP and USAID ICT for development policies, the study also contributed to understanding how participatory ICT for development theory is systematically translated into international ICT for development policies thereby enabling holistic understanding of the development discourse. A holistic approach to understanding the creation of ICT for development narratives can contribute to ongoing African efforts to identify alternative development models.

Finally, this study has contributed to understanding how the existence of power inequalities between developed and developing countries affect ideological autonomy in African countries. The study used a post-development approach to trace the link between the provision of financial and technical aid by the UNDP and USAID to Rwanda's ICT creation processes and the exercise of ideological influence by the

international development agencies on the conceptualization of the rhetoric within Rwanda's national ICT policy. A prominent influence identified by the study was the regurgitation of an overarching globalization, liberalization and privatization discourse in Rwanda's national ICT policy. The study argued that Rwanda's unquestioning adoption of the international neo-liberal ICT for development discourse can lead to the proliferation of multinational companies in the country's ICT sector with serious implications for local control of the internet and its content. This argument challenges the currently popular development participatory communication theory and existing internet-based participatory communication paradigms that have failed to take into consideration the relationship between power and participation. As a result, tracing the influence of international ICT for development discourse on the conceptualization of African national ICT policy enables the exposure of power inequalities influencing the transfer of international development policy into African policy and shows implications for such influence.

8.4 Limitations of the Study and prospects for future research

This study utilizes the UNDP's DOI (2001) and USAID's Leland Initiative (1996) as case studies to understand the international ICT for development discourse and its influence on the creation of Rwanda's national ICT policy. The two policies are used because the ICT discourse contained in the DOI (2001) and Leland Initiative (1996) represent prevailing UNDP and USAID perceptions of ICT for development at the time that the two agencies were involved in the creation of Rwanda's national ICT policy. One limitation of the study therefore is the fact that it does not look at current UNDP and USAID ICT for development policies because they are not relevant to understanding the influence of the development agencies on the creation of Rwanda's national ICT policy. In this regard, there is need for studies to analyse the discourse contained in current international ICT for development policies and examine whether there are shifts in international ICT for development rhetoric and further analyze how current international ICT for development policies impact on African poverty reduction strategies.

Another limitation of the study emanates from lack of response to e-mail questions sent to UNDP, USAID and Rwandan ICT policy makers. As a result, the study had to primarily rely on document analysis and literature review to analyse the case studies'

policy documents without official comments to enhance understanding of the organisations' ICT for development strategies.

As stated in chapter 4, this study uses a case study approach hence its findings on the UNDP, USAID and Rwanda cannot be generalized to other cases (Yin, 2003). The study therefore admits that implications for the influence of the international ICT discourse may slightly differ according to each country's unique ICT creation process. In this regard, there is still need for studies to analyse the influence of the international ICT discourse on a broader sample of African national ICT policies in order to be able to come up with observations that are representative of various African countries' ICT for development experiences.

Moreover, this study took a theoretical approach to analysing the translation of theory into international ICT for development policies and examine the influence of international ICT for development policies on the creation of Rwanda's national ICT rhetoric. As stated in chapter 4, the study's theoretical approach enables understanding of underlying power relations hidden in the use of language in development participatory communication theory and policy narratives capable of reflecting on real development practice (Wodak and Meyer, 2008). As such, this study points to the need for follow-up empirical research examining international and ICT for development practice. This would be useful for understanding the impact of current international and national ICT for development practices on the participation of local communities in the use of the internet for knowledge production.

Lastly, this study focussed on examining how the discourse contained in development participatory communication theory, international ICT for development policies and Rwanda's national ICT policy portray the use of ICTs, specifically, the internet, for participatory knowledge production in poverty reduction settings. With the advent of social media and the creation of interactive spaces for communities, there is considerable need to analyse how participatory development communication theory, as well as international and national ICT for development discourse has appropriated social media to development communication and further question implications for the participation of local communities in development processes.

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Appendices

Appendix 1. List of e-mail questionnaires
Sample of questions e-mailed to the UNDP ICT for development policy department

1. The UNDP created the Sustainable Development Networking Programme (SDNP) in 1992 to implement ICT for development projects in Africa. May you kindly send me information on the role of the SDNP in Rwanda's ICT sector from 1992- 2001?

2. How did the UNDP's SDNP experience influence the conceptualization of the UNDP's first ICT for development policy, the Digital Opportunity Initiative (DOI) created in 2001

3. How does the DOI promote the participation of poor communities in the creation of development knowledge on the internet and enable local communities, especially the poor people's knowledge to influence the creation of UNDP development policy?

4. What role did the UNDP play in the generation of knowledge for the creation Rwanda's national ICT strategy?

5. May you provide ICT for development documents presented by the UNDP at the "National Workshop on Information and Communications Technologies, Policy and Strategy for Rwanda," held in Kigali in 1998, from November 30 to December 4?

6. May you also provide any other relevant documents showing the role of the UNDP in the creation of Rwanda's national ICT policy?

7. What is the UNDP's current ICT for development strategy and how does the current ICT for development strategy promote the participation of poor people in internet-based knowledge production processes and enable ordinary people's knowledge to influence the creation of UNDP development policy?

8. What role has the UNDP played in the implementation of Rwanda's national ICT policy and plans since 2001?

Sample of questions e-mailed to the USAID ICT for development policy department

1. The USAID created the Leland Initiative in 1994 to implement internet connectivity as well as implement ICT for development projects in Africa. May you kindly send me information on the role of the Leland Initiative in Rwanda's ICT sector from 1994 to 2001?

2. How did the Leland Initiative promote the participation of local communities, especially poor communities, in the creation of development knowledge on the internet and enable poor people's knowledge to influence the creation of USAID development policy?

3. The USAID provided funding and offered technical assistance to Rwanda for the creation of the country's national ICT policy from 1998 to 2001. What was the USAID's ICT for development policy at the time that the agency assisted Rwanda to create a national ICT policy, and may you kindly send me a copy of the strategy?

4. The USAID made presentations at the first brainstorming conference on ICT for development in Rwanda entitled "National Workshop on Information and Communications Technologies, Policy and Strategy for Rwanda," held in Kigali from November 30 to December 4, 1998. May you send me documents presented by the USAID at this workshop and any other relevant documents indicating the USAID's contribution to the creation of Rwanda's national ICT policy?

5. Apart from the USAID's participation at the above mentioned workshop, what other role did the USAID play in the generation of knowledge for the creation of Rwanda's national ICT strategy?

6. What is the USAID's current ICT for development strategy; may you send me a copy of the strategy?

7. How does the USAID's current ICT for development strategy promote the use of the internet by poor communities to produce local development knowledge and enable poor people's knowledge to influence the creation of USAID development policy?

8. What role has the USAID played in the implementation of Rwanda's national ICT policy and plans since 2001.

Sample of questions e-mailed to other international development agencies (CIDA and DFID)

1. CIDA has played a central role in the creation and implementation of African national ICT policies. Which African countries has CIDA assisted in the creation of national ICT policies?

2. What role has CIDA mainly played in assisting African countries in the creation of national ICT policies?

3. What was CIDA's ICT for development policy at the time that the organization provided Mozambique with assistance for the creation of the country's national ICT policy? May you please send me a copy of the policy?

4. How did CIDA's ICT for development strategy at that time promote the participation of poor people in the use of ICTs, especially the internet, in the creation of development knowledge on the internet?

5. How did CIDA's ICT for development strategy at that time that the organization provided Mozambique with assistance for the creation of the country's national ICT policy enable poor people's knowledge to influence the creation of CIDA development policy?

6. What is CIDA's current development strategy and how does it promote the participation of poor people in the use of ICTs, especially the internet, in the creation of development knowledge?

Sample of questions e-mailed to the Government of Rwanda's ICT department in the President's Office

1. The UNDP and USAID are some of the international development organisations that assisted Rwanda in the creation of a national ICT for development policy from 1998 to 2001. To what extent did the two international development agencies play a role in the generation of ideas for the creation of Rwanda's national ICT policy?

2. The USAID and UNDP made presentations at Rwanda's National Workshop on Information and Communications Technologies, Policy and Strategy for Rwanda held in Kigali from November 30 to December 4, 1998.
   May you send me documents presented by the USAID and UNDP at this workshop and any other relevant documents indicating the development agencies' contribution to the creation of Rwanda's national ICT policy?

3. How does Rwanda's national ICT for development policy promote the use of the internet by poor communities to produce local development knowledge?

4. How does Rwanda's national ICT for development strategy enable poor people's knowledge generated on the internet to influence national development policy?

Sample of questions e-mailed to ECA Head Office, ICT policy department

1. The UNDP and USAID are some of the prominent international players in the creation and implementation of African national ICT policies. Information that i have indicates that ECA worked with the Government of Rwanda to organise a workshop leading to the creation of Rwanda's national ICT policy known as the National Workshop on Information and Communications Technologies, Policy and Strategy for Rwanda held in Kigali from November 30 to December 4, 1998. What role did ECA play at the workshop in question?

2. How did ECA contribute in the generation of ideas for the creation of Rwanda's national ICT policy during the above quoted workshop and may you kindly send information showing presentations made by ECA during the workshop if any?

3. Apart from organizing Rwanda's ICT creation workshop, what other role did ECA play in the creation of Rwanda's national ICT policy from 1998 to 2001?

4. Information that i have also indicates that the UNDP and USAID participated at the National Workshop on Information and Communications Technologies, Policy and Strategy for Rwanda held in Kigali from November 30 to December 4, 1998 and made presentations during the workshop. May you send me copies of presentations that were made by the two organisations at this workshop?

5. Apart from the UNDP and USAID's involvement at the above mentioned workshop, may you also send me any information that you may have indicating the role played by other international development agencies in the creation of Rwanda's national ICT policy such as the World Bank and UNESCO who also funded the Kigali workshop?

6. Rwanda's national ICT policy is generally seen as a model African national ICT policy that African countries have been encouraged to emulate, can you state some of the African countries whose ICT policies are informed by Rwanda's national ICT discourse?

Appendix 2.

Table 1. A Comparison of the poverty reduction rhetoric within development participatory communication theory, the UNDP's DOI strategy, and the USAID's Leland Initiative.

Development participatory communication theory	The UNDP's DOI strategy	The USAID's Leland Initiative
1. Defines the internet as a 'tool' or 'enabler' of development capable of facilitating global knowledge exchange.	Defines the internet as "enabler" of globalization enabling free flow of development information resulting in poverty reduction.	Defines the internet as a "tool" for development because of its ability to facilitate global and domestic information flows resulting in development.
2. Advocates local ownership of the internet, and its use to provide relevant local content in local languages to enable local communities to define development goals.	Silent about ICT ownership, and promotes use of the internet to provide relevant local content in local languages to meet poor people's information needs.	Silent about ICT ownership. Perceives language, content, social and gender roles, and cultural preservation and relevance as determining the internet's reception by society.
3. Stresses use of the internet to provide information enabling remote communities to access basic services e.g. health and education.	Emphasises use of the internet to facilitate access to basic services such as medical consultation, and distance education by remote communities'	Views the Internet as capable of providing remote, "unconnected" countries of Africa with access to information enabling more efficient public administration and management.
4. Emphasises the use of the internet to enhance efficiency and productivity in key public and private sectors.	Sees the internet as capable of providing expert information capable of increasing efficiency and rural productivity.	Recommends use of the internet to improve efficiency in government enterprises, private businesses, and increase efficiency in areas such as disease control and environmental management.
5. Champions use of the internet to enable the poor to access global economic opportunities	Advocates use of the internet to access global economic opportunities such as global	Sees the internet as capable of facilitating access to mass markets, increasing country

e.g. markets and employment opportunities.	markets and employment.	exports and creating employment opportunities.
6. Recommends liberalization approaches to ensure universal access to the internet and development opportunities.	Advocates liberalization policies to enable universal access to the internet at an affordable price.	Stresses liberalization to encourage expansion and improvement of telecommunications networks and access to the internet.
7. Promotes 'win-win partnerships' between local communities and international development agencies and private sector capable of providing technical and financial aid for the creation of a locally defined ICT industry.	Recommends 'win-win' partnerships involving local community, private enterprises, non-government organizations, multilateral organizations and governments.	stresses the role of the private sector in the creation of an ICT sector in Africa