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Bridging the Content Divide – New Media / ICTs as
possible Solution for sub-Saharan Africa?

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Foreword

It's done!

After seven years of studying (including one semester at the Babes-Bolyai University in Cluj Napoca / Romania, one semester at the University of Melbourne / Australia, one semester of finding a concept, one semester and one summer of writing), my diploma thesis is finished.

I would not have gotten so far without the support of many many people, whom I would like to thank in chronological order from primary school to this 8th September 2011 when I finally hand in this paper:

My parents: my dad who unfortunately did not get the chance to be part of my academic career; and my mum who always supported me and did not ask me on single time when I will finally be finished;

My teachers from grammar school that guided me through four challenging years (believing that one day I will become a good student, even if not necessary a mathematician or French native speaker);

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And a very special thanks to Daniela Schier for five years of support, motivation, challenge; and for keeping track as well as correcting my diploma thesis;

...as well all other friends and family that I have not individually mentioned: Thank you all!

1. Introduction

1.1 Epistemic Interest

Why this specific topic? Why writing a diploma thesis on sub-Saharan Africa? Two specific occurrences might explain my personal interest in that area, followed by a sentence that describes how I understand the term ‘Africa’.

The following statement has been made by Margit Maximilian¹ during a podium titled “Südafrika quo vadis” in the advent of the upcoming Soccer World Cup in South Africa 2010 on the 15th of April 2010 in Vienna, Austria: *"Wir haben einen Kontinent, der auch der K-Kontinent genannt wird: Kriege, Kriminalität, Katastrophen, Krankheiten, Kindersoldaten. (...) Dann gibt's auch das schöne Afrika. Das der roten Erde, der Tuareg, der Big Five. (...) Das Problem ist, dass die Bilder sehr sehr kompliziert sind, und es gibt nichts dazwischen."* (“We have a continent that is also named the ‘K-continent’: wars, crime, catastrophes, diseases, child solders. (...) And then there is the beautiful Africa. The red soil, the Tuareg, the Big Five. (...) The problem is that those pictures are very very complicated and there is nothing in between”) (Maximilian, 2010).

In February and March 2010 I had the chance to develop my own perception by travelling through South Africa, Namibia and Swaziland. The following paper is dedicated to all great people I have met during that time, fulfilling a promise I have made then to write on a topic that provides hope from and for that very continent.

I would like to mention one important detail when speaking of ‘Africa’, which I consider as being straight to the point. It has been made by the Polish journalist Ryszard Kapuscinski, who spent many years on African soil: *“The continent is too vast to be described. It is a true ocean, a planet on its own, a rich and varied cosmos. For the sake of taste, we can simply*

¹ Margit Maximilian works for the Austrian Broadcasting Company (ORF) and is since 1995 specialised as editorial journalist for foreign affairs with a focus on Africa.

say: Africa. In reality, Africa does not exist. It is only a geographic entity” (Kapuscinski, in: Vlugt & Vlam, 2010).

1.2 Academic Interest

What this paper tries to find out is already indicated in the title: Identifying if New Media / Information and Communication Technologies (ICTs) are adequate tools to overcome the content divide between the so-called ‘developed’ and ‘developing’ countries. This will first be analysed by the state of the art in literature, then followed by an analyses of a concrete project carried out in sub-Saharan Africa.

1.3 Structure and additional Notes

Chapter 2 introduces the research questions and the according hypothesis on the topic of ‘New Media / ICTs as a possible solution to overcome the content divide’.

Chapter 3 explains the applied methodological approach in order to deliver the answers to the posed questions of chapter 2. It furthermore introduces basic facts about the empirical data on which chapter 6 is based on.

Chapter 4 sets the theoretic framework for the empirical part. On top of that, a short historic synopsis of how the topic, that is originally set within the context of development theories and has further relevance for communication science studies as well, is made.

Chapter 5 provides definitions on important terms – especially on the different scientific approaches that are found in literature on the matter. Additionally, the big concept ‘digital divide’ that introduces the topic is narrowed down to the specific term ‘content divide’, representing the core of the paper. Furthermore, selected best practice examples are presented.

The first part of Chapter 6 introduces what (mass) media and (local) journalism accomplish for society, followed by a description on one specific local project that is based in sub-Saharan Africa. The second part explains how the data was generated, closing with the presentation of results by text and graphics of the empirical research.

Chapter 7 summarises the state of the art in theory and wording, before delivering the answers and analyses of the empirical part of the research. It closes with a short outlook on how the situation might develop.

Chapter 8 contains the literature used. The applied quoting style is ‘APA 5th’, according to the American Psychological Association.

In the appendix Chapter 9, two summaries (one in English language and one in German language) rap up the research paper on two pages each. A CV of the author, Stefan Ossmann, follows these summaries. Then the tables and figures are listed, continued by the codebook by which the empirical data was generated. The chapter finishes with the coded list of that actual data.

The author himself makes all translations of German or Dutch sources such as the statement by Margit Maximilian, but also of academic nature, into English language. These translations follow the original sources in brackets.

2. Research Questions and Hypothesis

The intention of the paper is to find out if ‘New Media’, also known as ‘Information and Communication Technologies, (ICTs) can be used as tools to decrease the gap between the ‘developed’ and the ‘developing world’². Starting from the wide question of if the gap between the rich and the poor, the having and the not-having, the knowing and the not-knowing can be narrowed, the paper will further question if the above mentioned New Media / ICTs could be such tools; and if so, how this could be done.

The following three research questions shall help to find those answers:

2.1 Relevance for Local Communities and beyond

Local journalism covers local issues. But to which extend? To be more specific, how does local journalism work for people at the other end of the gap? Which content is important to the communities in sub-Saharan Africa? Who are the protagonists of the news? For which audience are reports produced? Do the news instruct the audience to take action due to the content of reports?

Consequently, looking at the big picture – is this content of relevance to the whole population of a country? Could an audience beyond nation borders be interested in the topics? Research questions 1 and 2 focus on these issues:

Question 1: To which extend is locally produced content of relevance for the local population?

Question 2: To which extend is locally produced content of relevance for the whole state / the whole region?

² An explanation which terms will be used for what reason for New Media / ICTs follows in chapter 5.1.5; an explanation of the terms such as ‘developed’ and ‘developing’ follows in chapter 4.4.

The following hypothesis shall either be proved or disproved:

Hypothesis 1: If content is produced locally, it is of high relevance to the local community.

Hypothesis 2: If content is produced locally, it is of low relevance to the country / the whole region.

2.2 Empowerment for Local Communities and beyond

Whereas the first and second research question try to close the gap between knowing and not knowing by looking at content and audience, the last research question analyses if the topics can have empowering effects on the area the reports have been recorded in:

Question 3: To which extent can locally produced content have empowering effects on the country of origin of the reports?

The following hypothesis shall either be proved or disproved:

Hypothesis 3: If content is produced locally, it has major empowering effects for the local community.

Hypothesis 4: If content is produced locally, it has minor empowering effects for the country / the whole region.

3. Methodological Approach

The following methods have been chosen to generate the results for the present research:

3.1 State of the Art

A state of the art delivers the theoretical bases. The prelude circles around the current wording of ‘developed’ and ‘developing’; then going into detail about the wider term ‘knowledge divide’. Describing several facets of the term ‘digital divide’, before finally focussing on the term ‘content divide’, narrows the matter down. An explanation of the difference between New Media and ICTs completes the theoretical part. Due to the nature of the topic, beside edited books, books, journal articles, speeches, conference papers and magazine articles, a reasonable amount of internet-based literature is used.

3.2 Empirical Data

In order to answer the research questions which are theoretically based around the content divide, a socio-scientific approach has been chosen: By the method of a quantitative content analyses, an considerable amount of video clips from a Netherlands-based and financed NGO currently operating in five different sub-Saharan African countries (Ghana, Kenya, South Africa, Tanzania including Zanzibar, and Uganda) have been analysed.

The video clips (on average between two to four minutes in length) are categorised by a therefore created codebook, which can be found in the appendix of this paper. The generated results are provided in form of charts, followed by descriptions, in chapter 6.

3.2.1 Details on the Data

The research was carried out on all reports that have been published on the mentioned webpage within one year – starting from the most current published clip at the time of writing (from the 12th of March 2011) backwards - therefore the last clip within this research was published on the 10th of March 2010. A total number of 228 reports have been analysed.

This research period of one year seems to be a long enough period of time to get valid results – a shorter timeframe might have not been representative, a longer timeframe with even more clips would have exceeded the diploma thesis.

The reports can be retrieved under the following URL: <http://voicesofafrica.africanews.com/>

The detailed matrix of the collected data can be found in the appendix.

4. Prelude one: The Knowledge Gap Theory

The following chapter provides basic information on the ‘knowledge gap’ theory, so the context to the topics of chapter 5 as well as the empirical part can be put in perspective. Furthermore, the theoretic framework of the research will be explained.

4.1 Theoretical Embedding

Which discipline explains the gap between the having and the not having, between the privileged and the not privileged, between the knowing and the not knowing best? And to be more precise, is it a matter of describing the difference (i.e. the effect) or is it rather asking where the difference (i.e. the cause) comes from?

The paper’s aim is to find out if (and if so, how) the gap between the ‘knowing and the not knowing’, the ‘ones that have access to information and the ones who don’t’ can be overcome. This is done by focussing on the ones that do NOT have and know. Therefore a theoretical approach has been chosen that claims to provide answers on the matter: The development theories.

According to Fischer et al, theories generally claim to describe systematically how the world is structured and how it works, development theories want to look behind the curtain: They explain why development was possible or why, on the contrary, development did not happen - and furthermore how it can be achieved in the future (see: Fischer, Hödl, & Sievers, 2008, p. 12).

4.1.1 The Need for a Development Theory

Finding a theoretical framework in the field of development theories for this paper is due its complexity, its various approaches, its adoptions and its then following changes like opening Pandora’s box. Therefore the following chapter will first give an overview on the most renown and quoted theories, and then focuses on the theory this paper shall be or shall not be looked at.

Structuring these theories is another challenge. One possible way would be by the according years (most likely over one or more decades) those theories seemed to be appropriate to explain development and underdevelopment. Another possible way could be a general separation in those theories that are dealing with endogenous and those theories that are dealing with exogenous factors. While endogenous theories are based on the assumption that the reason for underdevelopment lies within the underdeveloped countries themselves, exogenous factors see the causes for underdevelopment outside the affected countries or regions.³

The boundaries between those categorisations cannot be accurately separated, and especially when the categories are divided by decades, the boundaries are blurry. When going into detail in one of the big theories, different approaches seem to be similar, overlappings can be found. Which leaves the question – does it make sense to construct development theories altogether?

Franz Nuscheler, professor emeritus for international and comparative politics at the University of Duisburg, Germany, is in favour of development theories. He states that the process of globalisation requests a new attempt of global theories and further explains the problem within the discipline by stating that “*meaningful theory building does not provide answers valid for all times, all places and all problems. It rather is a continuous process of learning and searching, by which experiences and errors are made*” (Nuscheler, 2001, p. 389).

Immanuel Wallerstein is more critical when it comes to the term ‘theory’ as he thinks that the term evokes the concept of coherent, rigorous, and clear interconnected ideas that might derive explanations from empirical reality for most people. The author criticises that the term theory also denotes the end of a process and therefore of closure, which also applies if the closure is only provisional. And this is where Wallerstein sees the actual problem, as he says that “*In the construction of adequate or plausible explanations of complex phenomena, proclaiming that one has arrived at a theory often imposes premature closure of scientific activity, and therefore can be counterproductive*” (Wallerstein, 2002, p. 358).

³ This general difference and which factor is relevant for which theory will be explained later in that chapter.

Wallerstein relates his thoughts to theories in general rather than to development theories, but later explains why his World-Systems Theory⁴ should in fact be considered as an analysis than a theory.

In the light of this statement, rather than agreeing for or against development theories yet, the following chapter provides an overview on development theories, followed by a conclusion in which theoretical light then this paper is written.

4.2 Development Theories as classified by Reinhold Thiel

So the next question that comes up in this context is which classification shall be used. The demand is not only to list and explain that the most renown and quoted development theories, but also to comment on their validity or to prove that they are out datedness.

Therefore the following classification by Reinold E. Thiel, managing editor of the German journal '*Entwicklung und Zusammenarbeit*'⁵, was chosen. He considers the 'Modernisation Theory' and the 'Dependency Theory' as the commonly used schools of thought when development and underdevelopment is described, but states five further theories, that when taking a closer look, must be named: Socialism ('Realsozialismus' – 'actually existing Socialism'), the Neoliberal Model (Washington Consensus), Concept of Cultural Conditionality of Development, the Flying Geese Paradigm and Sustainable Development (see: Thiel, 2001).

The following sub-chapters briefly describe those seven theories, listed according to an article named '*Zur Neubewertung der Entwicklungstheorie*' ('Re-evaluation of development theories'), published in 2001. Other authors from the field complement the classification by Thiel.

⁴ His 'Modern-World Systems Theory' (or analyses as he names it) will be explained in chapter 4.3.9.

⁵ The journal is currently published by InWent stands for 'Internationale Weiterbildung und Entwicklung' (InWent) and is since January 2011 along with the 'Deutscher Entwicklungsdienst' (DED) and the 'Deutsche Gesellschaft für technische Zusammenarbeit' (DGZ) combined in the 'Deutsche Gesellschaft für Internationale Zusammenarbeit' (GIZ). Most important clients of the GIZ are German ministries, but it also works along with the European Commission, the United Nations and the World Bank. The organisation is active in more than 130 countries and employees about 17.000 people worldwide. For more information, see: (GIZ, 2011).

4.2.1 Modernisation Theory

Fischer, Hödl and Sievers consider Development Economics as origin for Development Theories – and therefore Paul N. Rosenstein-Rodan as the most important early author on that matter. Rosenstein-Rodan, born in Krakow, Poland, studied at the University of Vienna before via the University of London moving to the United States, where he first worked at the *World Bank*, and later at the *Massachusetts Institute of Technology* (MIT). His basic idea was that there is a major difference between underdeveloped and developed regions and that this difference can only be analysed and improved by a specific analytical instrument. This instrument is according to the author the necessary active role of the state plus external supply of capital. Those two factors will then at a later stage make the big push towards industrialisation (see: Fischer, et al., 2008, p. 26).

It was the MIT where Rosenstein-Rodan met Walt Whitman Rostow, who published one of the now considered classics of development theories: '*The stages of economic growth.*' The subtitle '*a non-communistic manifesto*' already gives away the function of the book, which was published in 1960 – in the middle of the cold war. The basic message is that growth happens in five stages: The traditional society; the pre-conditions for take-off; the take-off itself; the drive to maturity; and the age of high mass-consumption. When the society has reached the fifth stage, western states will provide more financial means for social welfare and security (see: Rostow, 1960, pp. 4 - 16).

Thiel actually considers the German sociologist, jurist and economist Max Weber as originator of the modernisation theory, who saw the core and origin of modernisation within the economisation of social behaviour. He further states that Weber thought beyond economic borders, as the cultural argumentation was just as important to him – compared to other authors, who considered in the 1950ies and 1960ies, modernisation only as a system of economical growth based on capitalistic rules (see: Thiel, 2001, p. 11).

Half a century later, the Modernisation Theory seems to have failed to bring prosperity for all. Fischer, Maral-Hanak, Hödl and Parnreiter summarise the current situation by referring to a speech by the 33rd president of the United States, Harry S. Truman in the 1950ies. Truman then explained how poverty could be overcome and development can be reached according to the modernisation theory. The authors illustrate that this has not happened by referring to numbers on poverty published by the World Bank in 2001 and the United Nations

Development Program in 2003. Fischer et al summarise that *“More than half a year after Truman’s programmatic speech, still more than a billion people still live in absolute poverty”* (Fischer, Maral-Hanak, Hödl, & Parnreiter, 2004, p. 17).

4.2.2 Dependency Theory

While the Modernisation Theory is based around the presumption that the reason for underdevelopment lies within the then-called underdeveloped countries themselves (endogenous factors as already stated in chapter 4.1), the Dependency Theory follows an exogenous approach – responsible for the unequal situation are external factors. Andreas Novy, professor at the University of Economics and Business Vienna, states on his homepage: *“The dependency underlines that worldwide development does not harmonically lead to a balance of level of development, but is structurally based on social and geographical hierarchies. There is a dependency between dominant and exploited regions (...). Power is the centre of this theory – it radicalises the economical structuralism”* (Novy, 2010).

The arguably best-known person within the Dependency Theory, defined by Fischer et al as an anti-capitalistic movement with roots in Latin America, is the German-born André Gunder Frank. During his economic studies (Milton Friedman was amongst others one of his professors), he already sympathised with the ideas of John Maynard Keynes. In the early 1960ies, influenced by Marxist theories as well as by structuralistic ideas of Raúl Prebisch and Celso Furtado, Frank opposed the Modernisation Theory and joined the followers of the Dependency Theory. Frank at that time became famous not only for his intellectual thoughts but also for his radical and provocative statements (see: Fischer, et al., 2008, p. 147).

Argentinean born Raúl Fredrico Prebisch is also a well-known person within Dependency Theory followers. He became famous with his model of the secularist decline of the *‘terms of trade’*, which, in short, states that underdeveloped countries are disadvantaged when trading with developed countries. This is due to the fact that underdeveloped countries mainly export food and commodities, while developed countries mainly export industrial manufactured goods. As result, the countries are following an asymmetric diffusion of technical progress (see: Nohlen, 1999, pp. 316 - 318).

Prebisch's thesis, which can also be found as the '*Prebisch-Singer-Thesis*', has been heavily discussed since first published in 1949. It could have not been proven as being completely wrong or completely right, especially in long-term-research results. Hans W. Singer himself published a paper 50 years after the first publication of the assumptions, where he basically stated that with a few minor modifications and adoptions, his thesis still proves to be valid (see: Singer, 1997, pp. 2 - 5). The question why countries, which seem to be unaffected by those terms of trade as well, show indications for underdevelopment, remains unanswered.

Immanuel Wallerstein's 'Modern World-System' has also to be mentioned when speaking about Dependency Theories – Fischer et al for example attribute Wallerstein proximity to the dependency theory (see: Fischer, et al., 2008, p. 168). Since Thiel did not mention Wallerstein, his theory will be explained and brought into context at the end of the chapter.

4.2.3 Socialism

Socialism, in this context to be understood as 'actually existing socialism', is described as '*model of development by central governmental planning*'. This theory is also related to the previous described Dependency Theory, but differs in the fact that the whole economy of a state is under state control (see: Thiel, 2001, p. 12).

Ulrich Menzels essay on the end of the Third World and the therefore related failure of big theories in regards to development theories will be referred to when summarising this chapter, a amendment statement shall already be made when speaking about socialism:

Menzel, a German Political scientist and currently managing director at the Faculty of Social Science at the Technical University Braunschweig / Germany, describes in his essay "*Das Ende der 'Dritten Welt' und das Scheitern der Großen Theorie*" (The end of the 'third world' and the failure of the big/larger theory) how the world was separated in two sections. Due to the conflict between eastern and western countries in the 1950ies, western (i.e. capitalistic) countries were announced to be members of the First World, while eastern (i.e. socialistic) countries were announced to be members of the Second World. At the conference of Bandung in 1955, a third group, the non-aligned states were proclaimed. While the original idea was to create a third position to avoid conflicts between first and second world being carried out on the soil of those countries, due to the independence movement in the 1960ies and the

therefore followed shift in proportions within the United Nations, the term ‘Third World’⁶ got its connotation as being related to development theories (see: Menzel, 1991, pp. 14 - 16).

Since the events in 1989, the second world as we knew it disappeared, and therefore the old world order became obsolete – and, according to Menzel, the term ‘third world’, consequently lost its meaning as well. Only one system remained, and therefore we all have to accept the domination of capitalism. As a consequence, the author declares the collapse of the big theories (see: Menzel, 1991, p. 4).

4.2.4 The Neoliberal Model

According to Enrique Dussel Peters, neoliberal thinking started already in 1930ies primarily in the United States and in Europe - based at first on Karl Popper and later on Milton Friedman and August Friedrich Hayek, as backlash to Keynesianism in OECD-countries, as well as Marxism, Leninism and Stalinism in the Soviet Union. Its way into the social sciences can be found latest in the 1960ies by the practical implementation of neoliberal thinking by the ‘*Chicago boys*’⁷ in several Latin American Countries. The theoretical concept of neoliberalism assumes that individuals with their gained belongings produce their own societies. Societies, economies shall not be planned, the influence of the state shall be minimised or abolished at all, and the market will sort itself out (see: Peters, in: Fischer, Maral-Hanak, et al., 2004, pp. 128 - 131).

The Neoliberal Model is strongly linked with the term ‘Washington Consensus’, shaped by the US-economist John Williamson in the late 1980ies. It basically contained the policies of the International Monetary Fund, the World Bank, the US treasury department and several Washington-based economic research institutes in order to overcome the economic crises in Latin America. This overcoming should have happened by three main factors: Economic liberalisation, deregulation and privatisation (see: Kellernmann, 2006, p. 12).

⁶ The term ‘Third World’ and its context within the discussion about developed and developing countries is explained in greater detail in chapter 4.4.1.

⁷ Karin Fischer refers in another publication to the Chicago boys to an economic team that occupied political positions in Chile, South America in the year 1975. Those ‘Chicago boys’ introduced a new development model into the country, changing from import substitution to export orientation. The neoliberal model that group has introduced during the Pinochet dictatorship has been widely praised inside and outside of Chile for their policies against protectionist, socialist and populist tendencies to support the private property market economy (see: Fischer, 2009, pp. 305 -306).

How this implementation can not only bring state economies but whole economic regions into trouble can be seen for example when looking at the East Asian financial crises of 1997: The following statement was done during a speech held by Nobel-price winner Joseph Stieglitz on the 7th of January 1998 in relation to this East Asian financial crises and the lessons the world should have learned from that: *“The goal of the Washington consensus was to provide a formula for creating a vibrant private sector and stimulating economic growth. In retrospect the policy recommendations were highly risk-averse - they were based on the desire to avoid the worst disasters. Although the Washington consensus provided some of the foundations for well-functioning markets, it was incomplete and sometimes even misleading”* (Stieglitz, 1998, p. 14).

Even Williamson himself later noted that the Washington Consensus was not originally formulated as a policy description for development as rather a list of policies desirable for implementation in Latin America. At a speech within the ‘*Practitioners of Development seminar*’ series in 2004 (Williamson, 2004), the economist stated that there were development policies that he considered useful, but have not been included in the Washington Consensus – for the fact that they did not enjoy widespread support.

4.2.5 Flying Geese Paradigm

While socialism was primarily present in Eastern Europe and some African and Latin American countries, the Flying Geese Paradigm has its origins in Asia. It was developed by the Japanese economist Akamatsu Kaname and was published in the first article of the very first issue of the still existing ‘*Journal of Developing Economies*’ in 1962.

The name of the theory comes from the flight formation of geese – the “*wild geese flying pattern*” (Akamatsu, 1962, p. 11), which symbolises the economic rise of several states with one nation leading and others following. This rise, according to the author, basically happens in seven stages. The leading nation in this article is Japan, which could be followed by Asian states – based on industrialisation of developing countries to a level that manufactured consumer goods could be exported (see: Akamatsu, 1962, pp. 3 - 10).

That model, according to Thiel, did not fail: The predicted economic growth, based on state-controlled private economy and a high amount of private capital within the country, did

happen – up to the point where, according to the already mentioned Washington Consensus, the countries deregulated their financial markets, which then were flooded by excessive capital from western industrialised nations (see: Thiel, 2001, pp. 12 - 13).

4.2.6 Concept of Cultural Conditionality of Development

These five models described previously have one thing in common – they are all based on economic growth, and therefore orientated on the impact of economic factors.⁸ Thiel describes two further models, which reach beyond the economic part of development. The first one is the concept of development as cultural phenomenon, based on the writings of Max Weber about religious sociology published in 1905. Thiel interprets Weber by stating that the development of the expanding capitalism in Europe and Northern America is based on a specific, religious-based labour and economic ethics: Whoever works hard and does not spend all of the gained profit, acts in the will of god, and will therefore be compensated with profit for reinvestment (see: Thiel, 2001, p. 13).

The author further mentions Robert Klitgaard, who tried to explain the development of theories and politics based on cultural preconditions. He points at cultural differences between humanists and scientists. The perception that one general definition of culture and its conditions is difficult to make has lately been shown by an article of Alexander Schmölz and myself (Ossmann & Schmölz, 2011) in the context of cultural dynamics and its impact on education.

There is no general definition of culture – scholars from left to right, from modernisation to structuralism, from cultural studies to current definitions have their own, different ideas on the term. One possible perspective of how cultural conditionality can be distinguished is by separation in a holistic and a sycretic nature of culture. Ayan Kaya or Steward Hall for example support the holistic nature of culture, stating that cultural entity is something closed and self-contained. Gilroy on the other hand follows the sycretic notion of culture,

⁸ Thiel also calls those theories that are mainly based on economic factors „*economic or growth theories*“, and further states that some people (without explaining who those ‘some people’ are) would even call them development theories. Other authors have a different approach on the matter – Hödl for example refers to Fischer et al. and Kolland and their numerous review and clear statements on development thinking (see: Fischer, et al., 2008, pp. 18 - 19). Since the whole chapter is based around the categorisation by Thiel, those views are in this case not taken into consideration.

considering culture as something open and fluid (see: Ossmann & Schmölz, 2011, pp. 18 - 19).

Thiel does not consider the concept of cultural conditionality of development as completely failed, but rather as not considered enough. He claims that the potential of explaining development by cultural aspects has so far not been tapped to the full potential (see: Thiel, 2001, p. 15).

4.2.7 Sustainable Development

The last of Thiel's listed theories is the concept of sustainable development, which differs from all previous introduced theories as its purpose is not to explain already happened development and underdevelopment, but rather define a completely different aim: Reduction instead of expansion.

The first known publication on the matter was a book titled '*The limit in growth*' and was commissioned by the Club of Rome and published by Donella and Dennis Meadows et al in 1972 (Meadows, Meadows, Randers, & Behrens, 1972). Three decades later, three of the four authors (Meadows, Randers, & Meadows, 2004) published an update on that publication where they look back on their predictions then – with the conclusion that humanity is in a state of overshoot on a dangerous level. The authors used the system dynamics theory and a computer model called '*World3*' in their original publication, showing twelve different scenarios of world development up to the year 2100.

Those models had one thing in common – economic development cannot ignore the planet's limit of resources. Consequently, economy has to adapt to this fact. When the idea of reducing population growth and material consumption by deliberate means was firstly published, voices of outrage raised - not only by industrialists and politicians, but also by Third World advocates.⁹ 30 years later, the authors are even more pessimistic than they were in 1972 since human kind has squandered the opportunity to correct the then state of the art of the economic course; on top of that the gap between rich and poor has grown wider in the past three decades (see: Meadows, et al., 2004, pp. 5 - 6).

⁹ The authors do not give any indications or hints who those '*Third World advocates*' are.

Thiel also considers this model to have failed. Meadow's theories were of major importance to the then-forthcoming ecological movement, and sustainable living did make it into households and smaller groups, but policies of individual countries as well as of international organisations did not draw consequences from these results. All national policies still exploit resources, and all development politics still postulate development as reaching European and North American living standards and economic models (see: Thiel, 2001, pp. 16 - 17).

4.2.8 Amendment One: The 'Modern World-System' by Immanuel Wallerstein

One cannot speak about development theories without referring to the US-American sociologist and historical social scientist Immanuel Wallerstein and his Modern World-System Theory, since, apart from the classification by Thiel, it appears in most classifications, categorisations or other publications on development theories.

Wallerstein spent the first two decades of his scientific work with questions on colonial and afterwards post-colonial Africa. His then-made experience helped him, so Wallerstein, to analyse the *'Modern World-System'*, which became the focus of his academic research from the 1970ies onwards. His ideas went far beyond the perception of other scientists of the world then (similar ideas as within the dependency theory can be found), by considering the global system as total – and that total system became the unit he analysed (see: Fischer, et al., 2008, p. 168).

Walter Goldfrank from the Department of Sociology at the University of California honours Wallerstein's work as being the principal exponent of the world-system perspective, "(...) *that forms a formidable synthesis of continental historicism, 'Third World' radicalism, and Marxism,*", who's work has stimulated advances and was built upon two factors: Historical sociology and the study of contemporary 'development' (Goldfrank, 2000, p. 150).

Goldfrank further explains what he considers as most important and innovative about Wallerstein's ideas: The basic unit of analyses for modern social change is a capitalistic world economy. Each national society has to pass through a similar set of stages, which can be from tradition to modernity, or from feudalism to capitalism to socialism. From there, Wallerstein sees the necessity of a differentiating world economy that has different productive structures. Those structures are located in different zones; states from these zones are differentially

strong, and compete with each other and try to dominate one another. These zones are named core and periphery (according to Goldfrank not a new notion as already used by dependency theorists) as well as a semi-periphery (a term coined by Wallerstein).

The core in this notion is specialised in capital-intensive production, while the periphery is specialised in labour-intensive production; the boundaries between those zones are geographical and cultural boundaries. Countries of the semi-peripheral zone are somewhere in the middle: On the political side they are stabilising the world systems; on the economical side they have two aspects. In terms of capital intensity, they are recognised as intermediate between core and periphery, in terms of production, they are characterised by combined development. These zones make up the capitalistic world economy, integrated by market mechanisms. Those mechanisms are distorted by the stronger of the competing states, but none of them is strong enough to control the entire economy (see: Goldfrank, 2000, pp. 150 - 151, 169, 178).

As already stated in the introduction of the chapter, even when looking back at his work in 2002, Wallerstein himself did not consider his ideas a theory as rather an analysis. He seemed to be unhappy with the distinction within social scientific activity that he named the *three social arenas* (the economic, the political and the sociocultural) and therefore summarises his publication with the words “*I continue to believe that world-systems analysis is primarily a protest against the ways in which social science is done, including in theorizing*” (Wallerstein, 2002, p. 372).

4.2.9 Amendment Two: Empowerment

The second amendment *empowerment* is in most listings not classified as a development theory itself, but the term does regularly appear within the context of underdevelopment and development. As the third research question revolves around empowerment, the following overview shall help to categorise this catchword and relate it to the previous mentioned theories.

In the 5th edition of the book ‘Entwicklungspolitik’, Nuscheler defines empowerment as “(...) *enabling power of people to execute their right to resist repressive structures and to*

capacitate for participation” (Nuscheler, 2004, p. 623). He adds that empowerment is a primary goal of women’s advancement.

Following his definition, the origins of the term must be found somewhere within the gender equality discourse. And indeed, in the context of women and empowerment, one book is constantly quoted or referred to: Ester Boserup’s book *‘Woman’s role in economic development’*, published in 1970. The following two statements give an indication how authors reflected on Boserup’s publication:

Beneria and Sen for example point out that the book is a “(...) *comprehensive and pioneering effort to provide an overview of women’s role in the development process*”¹⁰ (Beneria & Sen, 1981, p. 279). On the other hand, the authors criticise the publication for the fact that the theoretical concepts tend to fall within the framework of neoclassical economics. They further state that the modernisation approach has negative effects on the general argument of the book (female workers are marginalised in the process of economic development because their economic gains as wage workers, farmers and traders are small compared to those of male workers) (see: Beneria & Sen, 1981, pp. 284 - 285).

Kanji, Tan and Toulmin analyse in the prequel of a reprint of Boserup’s book that “*Boserup’s analyses was couched in the then prevalent development paradigm of ‘modernisation’*” (Boserup, Kanji, Tan, & Toulmin, 2007, p. V).

Schicho and Nöst attribute the term a different origin – they put forward the idea that the wording ‘empowerment’ was developed within feminist organisations of developing countries such as ‘Development Alternatives with Woman for a New Era’ (‘DAWN’) in the 1980ies, who themselves took possession of the term, originating from the ‘Black-Power-Movement’ (Schicho & Nöst, in: Gomes, Hanak, & Schicho, 2003, p. 49). The authors further state that international financial institutions or worldwide acting companies have occupied the term ‘empowerment’.¹¹

¹⁰ The authors state that she ignores the process of capital accumulation set in motion during the colonial period, and that she does not systematically analyse the different effects of capital accumulation on women of different classes – and since wage is not just a payment for productivity, but also a determination for the costs of maintaining and reproducing the labour force, the Marxist theory of wage seems to be more appropriate than the neoclassical concept.

¹¹ As an example, Schicho and Nöst refer to the founding of a ‘empowerment task force’ by the then-president of the United States, George W. Bush, in the early 1990ies – proving that the term found its way into the official political language used by the United States.

This only brief introduction on the term already indicates the problem with the latter – different schools of thoughts use it by ways it fits their academic denominations and strategies; and as many terms within the socio-scientific community, it changes its context as time progresses. Therefore, the simple but straightforward definition by Nuscheler at the beginning of this chapter will be the theoretical point of relevance for the research questions. A specific approach how empowerment can be measured will follow in chapter six.

4.2.10 Development theories revisited: One for all?

Looking back at all those mentioned theories, the gaining of knowledge leaves a bitter taste. The modernisation theory, the dependency theory and socialism predominantly seem to have failed. The neoliberal model did not bring prosperity for all, the flying geese paradigm seemed to work until the neoliberal model came and damaged it, cultural conditionality of development could not establish itself due to different opinions, sustainable development and mankind as it is seem not to go along that well, and Wallerstein did not come up with a working solution to make the world a better place.

It seems that none of those theories manages to describe absolutely why there is a gap between the having and the not having. All of them try, and all of them have a core of truth, but none of them is sufficient enough. The situation gets even unsatisfactory when those theories are consulted to find a solution to overcome the gap.

Therefore the upcoming part of paper is not written in the light of any of those mentioned theories but reflects the opinions of the individual authors quoted.

4.3 The ‘Having’ and the ‘Not-having’ – setting the Terms

First, second, third and forth world; developed, developing, underdeveloped, undeveloped and least developed; North, South, East and West – all those and even more terms describe countries and regions within the development context. The following sub-chapter provides a ‘who is who’ of that terminology.

4.3.1 First, Second and Third World

An idea of how the world was divided in a first, second and third world has already been given in chapter 4.3.3. The term first appeared in the 1950ies and had its origins in the framework of the *cold war* and the therefore resulting east-west competition: The First World following a capitalistic dogma and the Second World following a socialistic dogma.

As for young independent states that emerged due to decolonisation in Africa, Asia the Caribbean and the South Pacific, according to Nuscheler, they did not want to involve themselves as operational fields of ideological and potential military clashes of the east-west conflict – so they were looking for an own vision and own destination in worldwide politics (see: Nuscheler, 2004, pp. 98 - 99).

This vision was casted by the idea of a conference of African, Asian, and Middle Eastern states by the five newly independent Asian countries Burma, Ceylon, India, Indonesia and Pakistan in 1954. One year later, from the 18th to the 25th of April 1955, the Afro-Asian conference, in literature often simply referred to as the '*Bandung conference*', was held in the Indonesian City of Bandung. This conference was of great importance for two reasons: First, it was the first major conference of non-European countries, and second, it led to the creation of non-aligned movement.

The participating countries (23 coming from Asia and six coming from Africa) agreed on three major goals at the conference: Publishing a common statement against colonialism and race discrimination, minimising the tensions between the First and Second World, and request the destruction of the nuclear arsenals of the capitalistic and socialistic block. This conference is therefore widely accepted as the foundation of the non-aligned movement, creating a third factor of power (see: Fraser, 2003, p. 115).

This relatively small number of members was soon expanded by the first 'United Nations Conference on Trade and Development' (UNCTAD) held in Geneva in June 1964. The 77 signatory countries named themselves '*The Group of 77*'. Due to its historic significance, the name is still in use today, even though it has now 131 member states (see: g77.org, 2011, Accessed 01/08/2011).

The member states of the Group of 77, also named '*Third World*', predominantly came from Africa, Asia and Latin America; Yugoslavia was the only European member country. The participating countries now had a platform to articulate their interests – which was challenging at times, since due to the large amount of members, agreeing on one common political statement proved to be rather difficult (see: Wolfrum & Arendes, 2007, p. 146).

The original claim for a third factor of power can still be seen in the group's aims as stated on their current website and reads as follows: "*The Group of 77 is the largest intergovernmental organization of developing countries in the United Nations, which provides the means for the countries of the South to articulate and promote their collective economic interests and enhance their joint negotiating capacity on all major international economic issues within the United Nations system, and promote South-South cooperation for development*" (g77.org, 2011, Accessed 01/08/2011). Fischer et al attribute the group that over time the political will of independence and the labour-union connotation that it once had got lost on the way (see: Fischer, Hödl, Maral-Hanak, & Parnreiter, 2004, p. 28).

Why the term Third World became a synonym for underdevelopment is still subject to discussion – the fact that the expression stood and still stands for underdevelopment has been predominantly agreed on. Brian Clive Smith for example, professor at the Indiana University, defines in his second edition of his book titling '*Understanding third worlds politics*' in the year 2003 the Third World as "*A group of countries which have colonial histories and which are in the process of developing economically and socially from a status characterised by low income, dependence on agriculture, weakness in trading relations, social deprivation for large segments of society, and restricted political and civil liberties*" (Smith, 2003, p. 1).

Other academics have a more differentiated, one might even say sophisticated view on the matter. Andrea Komlosy for example, lector at the Department of International Development at the University of Vienna, considers the history of the North-South relations, the geographical allocation of the '*Third World*' as one of the possible most difficult to be answered within the whole context of how the Third World became what we consider it to be (see: Komlosy, 2004, p. 57) .

As just seen, the ‘correct’ or appropriate use of the term *Third World* is difficult. Therefore, for further use in this paper, when the original literature uses the term ‘Third World’¹², it will be quoted as such without further comments.

4.3.2 Developed vs. Developing Countries

Relevant literature more often uses the terms *developed* and *developing* rather than First, Second and Third world – but the basic issue remains: Which definition should be considered as accurate or state of the art?

One option on deciding which terms to use is to refer to definitions of global organisations that deal with the matter – therefore the terminology of the biggest players within the field shall quickly be introduced:

The United Nations:

The UN data website provides a table of *developed* and *developing* regions. The *developed regions* are listed as North America, Europe, Japan, Australia and New Zealand; the *developing regions* are Africa, Americas excluding North America, the Caribbean, Central America, South America, Asia excluding Japan and Oceania excluding Australia and New Zealand (see: unstats.un.org, 2010, Accessed 17/01/2011).

When looking for a concrete country list of which nation is considered developed and which country is considered undeveloped, ‘appendix C’ indicates that such a list does not exist: “*There is no established convention for the designation of ‘developed’ and ‘developing’ countries or areas in the United Nations system. In common practice, Japan in Asia, Canada and the United States in northern America, Australia and New Zealand in Oceania, and Europe are considered ‘developed’ regions or areas. In international trade statistics, the Southern African Customs Union is also treated as a developed region and Israel as a developed country; countries emerging from the former Yugoslavia are treated as developing*

¹² What yet has not been mentioned is the person or institution that coined the term “Third world” that then has been used by the Group of 77– although subject to some discussion as well, the main opinion on the matter is that the French demographer Alfred Sauvy used this wording for the first time in a publication in the *L’Observateur* on the 14th of August 1952, titling “Trois Mondes, une planète” (three worlds, one planet). (see: Wolf-Phillips, 1987, p. 1311)

countries; and countries of eastern Europe and of the Commonwealth of Independent States (code 172) in Europe are not included under either developed or developing regions” (unstats.un.org, 2010, Accessed 17/01/2011). Although this definition does not tell us which ones the *developing countries* are, the same page lists nations that are described as ‘*least developed countries*’. Currently that table contains in total 49 countries, of which 25 are situated in sub-Saharan Africa.

In a second statement, the UN explains that if those terms can be found in documents, they are no strict definitions but tools to express the published data: “*The designations ‘developed’ and ‘developing’ are intended for statistical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process*” (unstats.un.org, 2011; Accessed 27/07/2011).

Of specific interest to this paper are the three factors that contribute to that categorisation. The index that measures a country’s average achievement in human development is called ‘Human Development Index’ (HDI) and is made up by the three aspects health, knowledge and income. *Health* considers the life expectancy at birth; *income* (also described as ‘standard of living component’) is measured by the ‘Gross National Income per capita’ (GNI); and *knowledge*, which is since the year 2010 made up by means of years of schooling for adults aged 25 years and expected years of schooling for children of schooling age.

This last component knowledge must be mentioned once more, since up to 2010 knowledge (until 2010 named ‘*education*’) was only measured by adult literacy and was therefore only a binary variable with no graduations (*literate* or *illiterate*). The new way of measuring, the actual access to knowledge is measured (see: undp.org, 2010a; Accessed 28/07/2011). This is of specific importance to this paper, since the digital divide that will be explained in greater detail in the following chapters focuses on the issue of access to knowledge.

The following graphic by the ‘United Nations Development Program’ (UNDP) illustrates the actual situation in the world. The countries displayed in black are considered having a low HDI, the countries displayed in light blue are considered having a medium HDI. The medium blue illustrated countries have a high HDI, the dark blue ones a very high HDI. One has to notice that the UN itself states that the HDI alone is not sufficient to measure a country’s level

of development, since for example political participation or gender inequalities are not included (see: undp.org, 2010a; Accessed 27/07/2011).

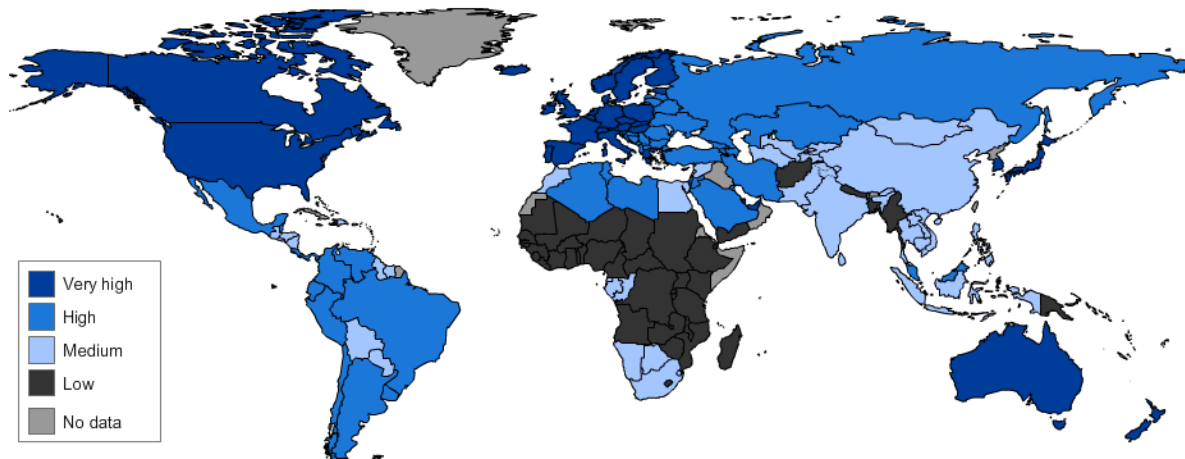


Fig. 4-1: World map of human development as categorised by the UNDP (un.org, 2011; undp.org, 2010b; Accessed 27/07/2011)

The World Bank

For a second opinion on the matter, an additional way of describing development will be introduced: Development as seen by the World Bank: Little surprising for a bank, the World Bank lists their idea of which countries are developed and which are developing according to the income of its citizens – to be more precise, by the 2010 ‘gross national income per capita’ (GNI) only, using the World Bank atlas method.¹³ The website states that ‘low-income’ and ‘middle-income’ economies are sometimes referred to as developing countries (‘low income’ countries are classified by \$ 1.005 or less; ‘low middle’ income countries are classified by \$ 1.006 up to \$ 3.975), adding that: *“The use of the term is convenient. It is not intended to imply that all economies in the group are experiencing similar development or that other economies have reached a preferred or final stage of development. Classification by income does not necessarily reflect development status”* (worldbank.org, 2011a; Accessed

¹³ The World Bank Atlas Method is a specific way of calculating the gross national income by a conversion factor that shall reduce the impact of exchange rate fluctuations in cross-country comparison of national income – for more information, see: (worldbank.org, 2011b, Accessed 27/07/2011).

27/07/2011). On classification on the prosperous side of nations is then named the ‘upper middle income group’ and the ‘high income’ group.

56 countries can be found in the ‘low middle’ category of the World Bank, only 35 countries in the lowest, the ‘low income’ category – of those 35 countries, 21 countries are situated in sub-Saharan Africa.

4.3.3 From Underdeveloped to Least Developed

In order to complete the previous connotations, terms such as ‘underdeveloped countries’, ‘undeveloped countries’, ‘backward countries’ or ‘least developed countries’ shall be mentioned as well.

The ‘Development Policy and Analyses Division of the United Nations’ (DESA) currently identifies three criteria for a country to be identified as a ‘least developed country’ (LDC): Gross national income per capita; ‘the human assets index’ (HAI) that measures the level of development of human capital by the indicators health, nutrition and education; and the ‘economic vulnerability index’ (EVI) that combines seven indicators reflecting the risk post to a country’s development by exogenous shocks. The LDC categorisation has been established in 1971, at that time only considering low per capita gross domestic product and structural impediments to growth (see: un.org, 2011; Accessed 28/07/2011).

The UN office of the high representative for the ‘least developed countries, landlocked developing countries and small island developing states’ (UN-OHRLLS) has published a list of those countries¹⁴. It contains in total 48 countries, of which one is in Latin America and the Caribbean, 14 are in Asia, and 33 are in Africa (see: UN-OHRLLS, 2011; Accessed 28/07/2011). No explicitly stated but easy for one to distinguish simply by looking at the list is that all 33 ‘least developed countries’ on the African continent are actually situated in sub-Saharan Africa.

When referring to ‘least developed countries’, the term of ‘*Fourth World*’ can occasionally be found for those nations. Being classified as least developed country might sound like a shame for the concerning countries; however, in terms of international support, the classification has

¹⁴ This list also says that countries with a population larger than 75 million are not within this rating.

its advantages: The loans provided by the International Development Association, a subsidiary company of the World Bank, contain specific, advantageous rates for these loaning countries (see: Nuscheler, 2004, p. 100).

The term ‘underdeveloped countries’ has widely been replaced by the term ‘developing countries’. Nigerian-born author and university professor Kema Irogbe relates that change in notion to the dependency theory. He criticises that in this case development has the connotation of being evolutionary. Irogbe does not consider underdevelopment as an original state since underdeveloped states have experienced the phenomena of slavery and colonialism, which he claims the developed countries have not experienced (see: Irogbe, 2005, p. 128).

While the term ‘underdeveloped country’ can still be found rarely in literature on the topic, the term ‘backward countries’ is not in use any more in literature on development¹⁵; this also applies to the term ‘undeveloped country’¹⁶.

4.3.4 State of the Art in correct Narration

So far the terms ‘developed countries’, ‘industrialised countries’, ‘countries with a high or very high Human Development Index’, ‘upper middle income or high-income countries’ have been mentioned. The term that seems to be most ‘popular’ in the current academic discourse is ‘global north countries’, also to be found as ‘countries that occupy the Northern hemisphere’ as used for example in the ‘*Brandt Report*’ – this report even carried that terminology in the title (see: BrandtCommission, 1980).

The *Brandt report*, named after the former Western German Chancellor Willi Brandt and published by the Independent Commission on International Development Issues in 1980, is widely accepted as one of the major publications on how the economic disparities between the rich north and the developing south could be reduced. The ‘Share The World’s Resources’

¹⁵ If a digital search on the term is carried out, only a small number of results compared to terms like developing countries appear. Those few results are mainly articles, statements and posts that reflect a rather one-sided political attitude of the authors and will therefore not further be considered in this paper.

¹⁶ One of the first hits when again carrying out a digital search is the URL: www.underdevelopedcountries.com. (Accessed 27/07/2011) It lists countries that are, according to the IMF (International Monetary Found) undeveloped, but does not give a scientific definition on what „undeveloped“ means. All further links refer to ads at Goolge, except the „Contact us“ link, where the page then is offered for sale.

organisation (STWR), a think tank with consultative status at the Economic and Social Council of the United Nations, describes the report as “*the most comprehensive and broad based analyses of the various issues of international development to date*” (stwr.org, 2011; Accessed 29/07/2011).

The *Brant report* was published 1980 – three centuries later, this terminology has its definition issues as well. Nuscheler states that the ‘North’ is sometimes relating to the ‘Euro-Atlantic West’, sometimes to the OECD-countries, and sometimes includes the industrial East as well. This Euro-Atlantic West again has its definition problems since Mexico and South Korea are part of the OECD as well – in addition to the fact that the so-called ‘industrial countries’ generate now more economic production by services rather than industrial production. And yet another issue arises: The term ‘South’ is quite likely to be considered to be a geographical term, assuming that most or all concerning countries are situated in the southern hemisphere – which is a mistake as well (see: Nuscheler, 2004, p. 98).

The ‘not-having’ have so far been described as ‘South’ or ‘Southern Countries’, ‘Third World’, ‘underdeveloped countries’, ‘developing countries’, ‘undeveloped countries’ and ‘backwards countries’. The latter two can be neglected since it has already been described that those wordings are ‘out of date’; further the line to the terms ‘Fourth World’ and ‘least developed countries’ has already been drawn – but was is the current up to date term?

Once again Nuscheler can be taken as a reference. The first edition of his book ‘*Entwicklungspolitik*’ was published in 1985; nearly two decades later, in his 5th edition, he explains how globalisation has a bigger impact than ever on global governance. One wording that is constantly found since the very first edition is ‘North-South-Relation’ when relating to underdevelopment and development (see: Nuscheler, 2004, p. 20).

Even by agreeing on a specific wording that seems to be the state of the art, one problem remains, as pointed out by Englert, Grau and Komlosy. They describe the discussion on the terminology as naming the power- and development disparities on a world scale, which finally “*reflect the relations of power which form the base of uneven international division of labour*”. Englert et al further state that only changing the wording to the state of the art ‘North-South’ let us not escape from the actual dilemma – our language consequently makes

the satellisation visible, changing the terms alone will not make it disappear (Englert, Grau, & Komlosy, 2006, p. 13).

Conclusion:

After having examined various definitions over six centuries, it seems that there is not one politically correct definition of the ‘having’ and the ‘not having’. Therefore this paper refers for quotations to the wording that is used by the original resources; as for this papers own statements, ‘having’ and ‘not having’ will be used, as it seems to be the most neutral expression. Additionally, ‘having’ and ‘not having’ can also be related to ‘having or not having access to knowledge’, which is the focus in the following chapter.

4.4 The Knowledge Gap

Until now the focus of the chapter very much circled around theoretical thoughts from a humanities and development studies approach. This paradigm will now shift towards a socio-scientific, communications science approach, as the ‘knowledge gap theory’ will be introduced. After the original definition and further thoughts, the whole chapter will be summarised and then closed.

4.4.1 The Knowledge Gap Theory as coined by Tichenor et al

In 1970, the first and until today widest accepted definition of the disparity between the knowing and the not-knowing was published by Phillip J. Tichenor, George A. Donohue and Calrice N. Olien in the journal ‘*Public Opinion Quarterly*’ – finding its way into the books by the title ‘knowledge gap theory’: “*As the infusion of mass media information into a social system increases, segments of the population with higher socioeconomic status tends to acquire this information at a faster rate than the lower status segments, so that the gap in knowledge between these segments tends to increase rather than decrease*“ (Tichenor, Donohue, & Olien, 1970, p. 159).

This publication was written by an interdisciplinary research team at the University of Minnesota, where the scientists investigated the effects of newspaper readership in Minnesotan communities in the 1960ies. Their findings summarised by academics of the same university read as follows: “(...) *the slope of information uptake was significantly steeper for those with relatively higher educational attainment, such that the gap between individuals with higher and lower education widened over time*”; in the same paper putting their results into perspective by stating that “(...) *the relationship between newspaper reading and public affairs knowledge was generally positive for all*“ (Hwang & Southwell, 2011).

It did not take long until the scientific community reacted on that theory – the following sub-chapter gives two examples on the discussion that followed:

4.4.2 Further Thoughts on the Knowledge Gap

It was again the ‘*Public Opinion Quarterly*’ that published an article on the issue, expanding the theory by the factor ‘individual interest in news events’. Genova and Greenberg found out that specialised interests in ongoing news events of individuals contribute even more to information gain than socioeconomic factors like education, particularly when the information was complex. They described that finding as: “*A more optimistic proposition than the original knowledge gap hypothesis*”, offering an “ (...) *alternative route by which public knowledge could be expanded*” (Genova & Greenberg, 1979, pp. 88 - 89).

Bonfadelli (see: Bonfadelli, in: Hömerg, Pürer, & Saxer, 1994, pp. 61 - 74) derivates five theoretical topics that manifest the theoretical frame of Tichenor et al’s theory, involving mainly German-speaking authors in his analyses. According to the Swiss scientist, the following five factors and processes are relevant for the socioeconomic status:

- # Communication skills: Media users with higher education have higher reading and understanding skills, which are important to gather political and scientific knowledge.
- # Previous knowledge: If one already has knowledge on a topic, similar topics are more likely to be noticed and more likely to be understood.
- # Relevant social contacts: Educated persons have more interpersonal contacts, a broader

sphere of activities and a bigger amount of social reference groups.

Selective selection, acceptance and keeping of information: There is a coherency between education and voluntary and active search for information.

The media system: Most information is published via printed media, which itself concentrates on the interests of the higher socioeconomic consumers and is therefore more widely used by that specific group¹⁷ (see: Bonfadelli, in: Hömerg, et al., 1994, p. 72).

The knowledge gap is still debated within the field, but seems to have lost its importance due to additional factors that have emerged.

With the increase of digitalisation within mass media (and the accompanied change in how media is consumed), the scientific community realised that New Media / Information and Communication Technologies (ICTs) are becoming an increasingly relevant position within the discussion. The following chapter will show how a new term, the ‘digital divide’, expands the discussion on the topic.

¹⁷ One has to keep in mind that the edited book was published in 1994 – the significance of print media has changed since then.

5. Narrowing down the Matter: From Digital Divide to Content Divide

While the previous chapter had its focus on the wider matter of ‘knowing and not knowing’, the following chapter will describe a specific phenomenon of the bigger issue – the *digital divide* and its outcomes.

Therefore the chapter provides an overview of the used terms, followed by a historical abstract on the term digital divide itself. The middle section outlines the digital gap by providing numbers and tables as well as initiatives to decrease this gap on various levels. The last part of the chapter is dedicated to a sub-category of the ‘digital divide concept’ – the ‘content divide’. Starting with the origins of the term, theoretic approaches of how the content divide can be fought will be introduced, closing with selected hands-on projects that are already successfully in use.

Similar to the previous chapter, most literature used for the present chapter was written in English language. For the appropriate terms in German language, one can for example refer to Felix Weil, lecturer at the *Hochschule der Medien* in Stuttgart, Germany and Co-editor of the ‘International Review of Information Ethics’ magazine (IRIE). He defines the digital divide (‘Digitale Spaltung’) as ‘*digitale Kluft, also die ungleichmäßige Verbreitung von Informations- und Kommunikationstechnologie - IuK-Technologie*’ (‘digital gap, so the uneven distribution of Information and Communication Technologies, short IuK-technologies’) (Weil, in: Badura, 2007, p. 67).

5.1 A matter of Definition? ‘New Media’ vs. ‘Information and Communication Technologies’ (ICTs)

Before going into detail on the digital gap and its specifications, a differentiation between the terms and the reason why this paper refers to which term or definition (or why and when it refers to both) is made:

5.1.1 Option One: Information and Communication Technologies (ICT, ICTs or ICT's)

Finding a definition for ‘Information and Communication Technology’ is simple – there are hundreds of definitions by hundreds of authors and institutions that can be quoted. The following two definitions have been chosen since the authoring institutions are well known in the field:

The Cambridge University Press published a book edited by Tim Unwin titling ‘*ICT4D - Information and Communication Technology for Development*’ (Unwin, 2009). The author, holder of the UNESCO Chair in ICT4D and professor of Geography at the Royal Holloway University of London, refers to the term ICT as a conceptual framework and lists a plethora of varieties on definitions and classifications of the technologies associated with information and communication.

Normally frowned upon in ‘traditional’ scientific publications, Unwin quotes Wikipedia when subsuming IT or ICT as “*the subject that deals with electronic computers and computer software to convert, store, process, protect, transmit and retrieve information*” (wikipedia.org; in: Unwin, 2009, p. 77). The next quotation the author uses is also taken from a web-based encyclopaedia named ‘whatis.com’ and emphasises the different types of technologies themselves rather than the use of it: “*It is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning*” (whatis.com; in: Unwin, 2009, p. 77).

The last source Unwin quotes is C. J. Hamelink from the Royal Netherlands Academy for Arts and Sciences. He categorises the complex issue in five different groups: Capturing technologies – such as cameras and digital video recorders; Storage technologies – such as CD-ROM and film; Processing technologies – such as application software; Communication technologies – such as Local Area Networks; and Display technologies – such as computer monitors or screens of mobile phones (see: Unwin, 2009, p. 77).

After having mentioned that the distinguishing between the separate technologies became increasingly difficult since the late 1990ies due to digitalisation, Unwin rounds up his conceptualising with three sets of interconnected processes: The capture of information, the storage of information, and the ways in which people access and share information (see: Unwin, 2009, pp. 77 - 78).

The second important institution listed in this chapter due to its relevance when it comes to development and technology, is the *World Bank*. In the executive summary of its 176th working paper, ICT is defined as “*not only Internet alone, but also including radios, wireless phones, computers connected (or not) to the Internet, electronic brail writers, and a wide variety of software, hardware, or tools such as operating systems, databases, email or office productivity applications, networks, and so forth*” (Melhem, Morrell, & Tandon, 2009, p. viii).

One more thing that needs to be mentioned is the fact that in literature three different ways of writing the acronym can be found: ICT, ICTs and ICT’s. The first two relate to either the singular or plural of the technology term, the apostrophe in third one seems to be an author’s choice. In the following quotations, the type of writing in the original source will be used; as for own thoughts, the most used version ICTs (as seen in the title of that paper) will be used.

5.1.2. Option Two: New Media

Finding a definition for the term ‘New Media’ is just as simple – again the question of which definition shall be used must be put forward. Due the nature of the subject, the following approach has been chosen: Since it is a ‘new media matter’, the term ‘new media’ has been entered in search engine of the webpage ‘Google scholar’; then the author with the most quotations has been picked. Seven publications had more than 1.000 quotations at the time¹⁸ - for which only three authors/editor teams are responsible: Byron Reeves and Clifford Nass; Manuel Castells; and Liv Manovich.

The book by Reeves and Nass (see: Reeves & Nass, 2003) is primarily based around experiments on human behaviour in interaction with media and does not provide a definition that is valid for this paper.

¹⁸ The search was carried out on the 15th of January 2011 on the web page <http://scholar.google.at/>

Manuel Castells, a Spanish sociologist with a focus on information society and communication research, who was between 2000 and 2009 the most often cited communication scholar according to the '*Social Sciences Citation Index*' worldwide (see: Castells, 2009), wrote a trilogy named '*The Information Age*'. In the first book of that series, titled '*The Rise of the Network Society*', Castells speaks of 'New Media' in the context of mass media culture – he reflects on mass culture, mass communication and mass audience (see: Castells, 2004, pp. 355 - 370); but does not give a precise definition in terms of communication devices – and will therefore be neglected for the definition of the term in this chapter.

The last one of the three authors is Liv Manovich, professor in the Visual Arts Department at the University of California as well as at the European Graduate School. Additionally, he is director of the Software Study Initiative at the California Institute for Telecommunications and Information Technologies. In the first chapter of his book '*What is New Media*', he describes his view on the principals of new media, what new media is and what new media not is. In his introduction, Manovich states that the popular definition of new media (Internet, Web sites, computer multimedia, computer games, CD-ROMs and DVD, virtual reality) is too limiting if we want to understand the effects of computerisation on a culture (see: Manovich, 2001, p. 43).

The author lists five principals of new media, adding that not every new media object obey these principals and should therefore be considered as general tendencies rather than absolute laws:

- 1) Numerical representation – all media objects are composed of a digital code.
- 2) Modularity – a New Media object has the same structure throughout.
- 3) Automation - principle one and two allow to automate many operations involved in media creation, manipulation and access. This means, that at least in parts, human intentionally can be removed from the creative process.
- 4) Variability - a new media object is not something fixed once and for all but can exist in different, potentially infinite, versions.
- 5) Transcoding – the structure of new media follows the established conventions of computer's organization of data.

The author further adds that these tendencies will manifest themselves more and more since the computerization effects the layers of culture deeper and deeper (see: Manovich, 2001, pp. 49 - 66). The book was published in 2001, so it is possible that this manifestation has already happened. Since there is no second edition of the book yet, Manovich's theses remain unanswered for now.

After this rather technical description what new media is, he lists six examples of what new media is NOT:

- 1) Analogue media converted to a digital representation.
- 2) Media carrying a different digital code (all digital media share the same code and can therefore be displayed on one machine even if the media types such as text, images, visual or audio time data are different).
- 3) Media that stores data sequentially.
- 4) Media that does not contain a fixed amount of information (data loss during digitization).
- 5) Media where each copy successive loses quality.
- 6) Media where the order of presentation is fixed (see: Manovich, 2001, pp. 66 - 74).

5.1.3 Option three: New Technologies instead of New Media?

Going back to the caption of this chapter, a sufficient answer to the posed question could not be found. Not even the United Nations homepage provides a definition for separation of the two terms.

A third option of wording can be found within a definition by the European Commission, that does involve the terms 'ICTs' and 'old' and 'new', but not as 'New Media' but as 'new technologies': *"Information and communications technologies (ICTs) is a term which is currently used to denote a wide range of services, applications, and technologies, using various types of equipment and software, often running over telecom networks. ICTs include well known telecom services such as telephone, mobile telephone and fax. [...] Applications include videoconferencing, teleworking, distance learning, management information systems, stock taking; technologies can be said to include a broad array ranging from 'old' technologies such as radio and TV to 'new' ones such as cellular mobile communications"*

(European Commission, in: Chen, 2007, p. 15).

Even in this definition, the European Commission refers to the term ‘can be said’ rather than using absolute terms, and it focuses only on the technology when describing new media.

5.1.4 Option four: The German-speaking Way of looking at Things

When defining the term ‘media’, German-speaking literature has a different approach of setting the terms. Roland Burkart’s introductory definition (his categorisation of media is the current state of the art at the Department of Communications at the University of Vienna), refers to Ulrich Saxer who states that there is no by the whole (communication)-scientific community accepted definition, of what media or the according medium is or are. This applies especially to a definition that goes beyond the material or technological aspects (see: Burkart, 2002, p. 40).

According to this introduction, Burkart classifies media in four levels, categorised by its technical aspects:

Primäre Medien (‘Primary media’): They contain language and all kind of non-verbal communication.

Sekundäre Medien (‘Secondary media’): All media that needs a technical device at sender’s side, but can be consumed without a technical device.

Tertiäre Medien (‘Tertiary media’): The sender and receiver need technical devices in order to send and receive content;

Quartäre Medien (‘Quaternary media’): They are also described as ‘digital media’ or ‘online media’ that are based on digitalisation and require the existence of a computer and an Internet connection (see: Burkart, 2002, pp. 36 - 38).

5.1.5 Compromising on New Media / ICTs

Comparing the first two approaches, the most obvious difference was the academic background of the authors or institutions as well as the context in which the terms were used. It seemed that the term ‚ICT’s’ was more likely to be used in technical terms by authors that have a natural science background whereas the term ‚New Media’ was more likely to be used in cultural terms by authors that have a background in humanities or social sciences.

Analysing the content of the first two definitions, a major difference between ‘New Media’ and ‘ICTs’ cannot be found, especially not from a technological aspect. Even after further reading on the matter, there seems to be no substantially discrepancy on the terms.

The further terminology ‘new technologies’ was only occasionally found in according literature, and especially in the development context, it was rather rare, and is therefore not of relevance for this research. The German categorisation by Burkart seems not to be much used quoted by authors that write in English language. Since this paper is mainly based around English-speaking literature, this approach will be neglected.

As a consequence, the first two terminologies (‘New Media’ as well as ‘ICTs’) will be used in this research, according to their original occurrence and related to the theoretical framework of the according chapters. For the same reason, both terms can be found in the title of the paper.

5.2 The Digital Divide

The catch phrase ‘digital divide’ is inevitable when looking at media and development. The following chapter will provide definitions, tables and charts to illustrate the matter, theoretical core concepts, and selected practical examples that indicate solutions of how the divide can be reduced.

5.2.1 A short Definition of the Term

As in the previous chapter, a definition of the term according to a specific person or

organisation reflects its ideology or mission and is therefore subject to its specific way of approaching the matter.

The definition chosen for the term ‘digital divide’ for this research is taken from the ‘Organisation for Economic Co-Operation and Development’ (OECD)¹⁹ for the fact that it summarises the matter distinctively and explicitly in two sentences: *“The term ‘digital divide’ refers to the gap between individuals, households, businesses and geographic areas at different socio-economic levels with regard to both their opportunities to access information and communication technologies (ICTs) and to their use of the Internet for a wide variety of activities. The digital divide reflects various differences among and within countries”* (OECD, 2001, p. 4).

The same paper provides indicators of how the digital divide can be measured: Communication structures is named as main indicator, followed by computer availability (and potentially the availability of alternative access through TV’s or mobile phones) and Internet access (see: OECD, 2001, p. 5). Although the OECD paper was published nearly a decade ago, those indicators are still used by the OECD as with today. The following sub-chapter provides numbers to illustrate that gap.

5.2.2 The Divide in Numbers

The most quoted and respected data when it comes to use of ICTs are the numbers provided by the ‘International Telecommunication Union’ (ITU), who is, according to their own homepage *“The leading United Nations agency for information and communication technology issues, and the global focal point for governments and the private sector in developing networks and services”* (itu.int, 2011a; Accessed 17/01/2011).

The ITU has 192 member states, came into being 145 years ago, and (amongst a lot of similar work in the field) provides a yearly updated statistic on ICT facts and figures. All following figures were published on the 21st of October 2010. More current numbers cannot be

¹⁹ The OECD has 34 member states, of which 18 are located in Europe. The member states are described as ‘most advanced’ as well as ‘emerging countries’ Interesting enough, not even one African state is within the member group. Their mission according to their own homepage is to promote policies that will improve the economic and social well-being of people around the world. How that is done without involving the poorer countries is not stated on the webpage. For more information on members and mission, see: (oecd.org, 2011; Accessed 24/01/2011).

provided, since the data for 2011 has not been published yet. The newest data is stated on the webpage as ‘upcoming in September 2011’ (see: itu.int, 2011a; Accessed 29/08/2011).

The first charts provide the numbers of people using phones (fixed and mobile per 100 habitants) as well as Internet users (any device and broadband subscriptions per 100 habitants) from the years 2005 until 2010, classified by ‘*developed countries*’, ‘*developing countries*’ and ‘*world total*’. The numbers for 2010 are estimates by the ITU. (Source for all five tables: http://www.itu.int/ITU-D/ict/statistics/at_glance/KeyTelecom.html, Accessed 17/01/2011).

The definition of which countries are considered as ‘developed’ and which ones are considered ‘developing’ is done according to the ‘*UN M49*’, which is described as “*A standard for area codes used by the United Nations for statistical purposes, development and maintained by the United Nations Statistics Division*”. Within that list, ‘developed’ and ‘developing’ are the only two categories existing. The detailed listing can be found at the ITU’s website: (itu.int, 2011b; Accessed 25/08/2011).

How the ITU is using this ‘*UN M49*’ list to code who is developed and who is developing is unclear – a link on that specific page where the classification of macro geographical regions and sub-regions is announced takes the user to the website that states that there is no established convention who is a developed and who is a developing country – the same homepage that this paper has already referred to in chapter 4.3.2.

Fixed telephone lines	2005	2006	2007	2008	2009	2010
Developed	46,9	46,3	44,6	42,4	41,5	40,9*
Developing	13,0	13,3	13,3	13,0	12,0	12,1*
World	19,3	19,4	19,0	18,3	17,7	17,3*

Tab. 5-1: Habitants that have access to fixed telephone lines in developed countries, developing countries and the whole world

Mobile cellular subscription	2005	2006	2007	2008	2009	2010
Developed	82,3	93,4	102,0	109,2	114,3	116,1*
Developing	22,9	30,0	38,5	48,2	57,7	67,6*
World	33,9	41,7	50,1	59,3	67,9	76,2*

Tab. 5-2: Mobile cellular subscriptions in developed countries, developing countries and the whole world

Estimated Internet users	2005	2006	2007	2008	2009	2010
Developed	51,0	53,6	58,8	62,0	66,6	71,6*
Developing	7,8	9,4	12,3	15,3	18,5	21,1*
World	15,9	17,5	20,8	23,8	27,1	30,1*

Tab. 5-3: Estimated Internet users in developed countries, developing countries and the whole world

Fixed broadband subscriptions	2005	2006	2007	2008	2009	2010
Developed	11,9	15,3	18,3	20,6	22,2	24,6*
Developing	1,3	1,8	2,3	2,9	3,5	4,4*
World	3,3	4,3	5,2	6,1	6,9	8,0*

Tab. 5-4: Fixed broadband subscriptions in developed countries, developing countries and the whole world

Mobile broadband subscription	2005	2006	2007	2008	2009	2010
Developed	4,6	10,8	20,7	28,7	41,0	51,1*
Developing	0,3	0,5	1,0	1,9	3,5	5,4*
World	1,1	2,4	4,6	6,8	10,3	13,6*

Tab. 5-5: Mobile broadband subscriptions in developed countries, developing countries and the whole world

The following charts illustrate those numbers, going back further another five years (therefore covering a ten-year period from 2000 until 2010 – again numbers from the year 2010 are estimates by the ITU):

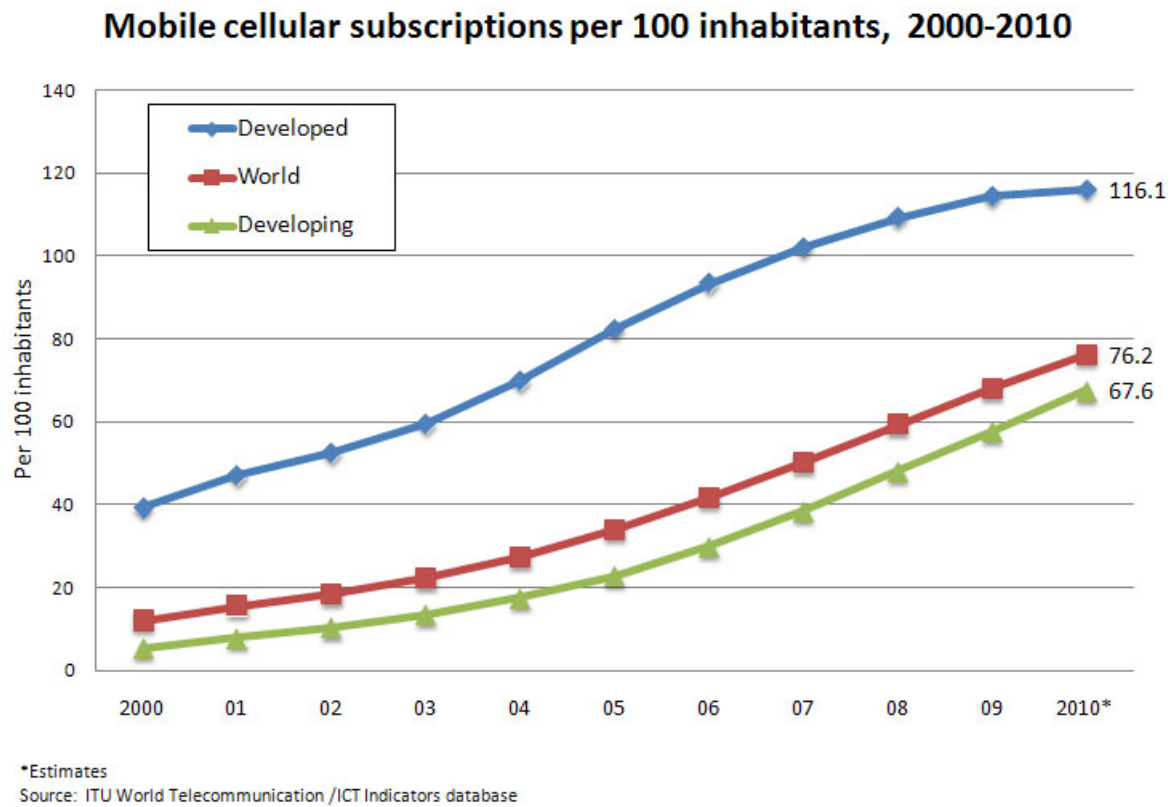


Fig. 5-1: Mobile cellular subscription per 100 inhabitants from the year 2000 to the year 2010 in developed countries, developing countries and the whole world

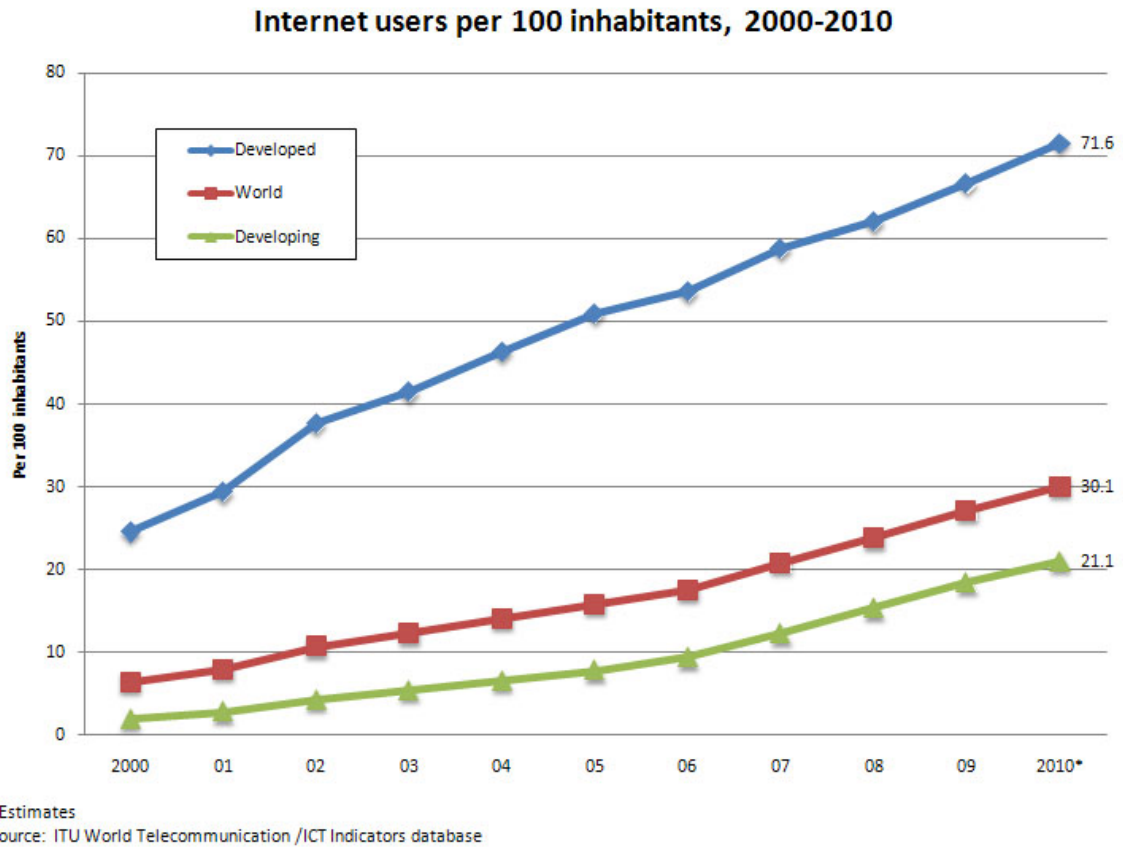


Fig. 5-2: Internet users per 100 habitants from the year 2000 to the year 2010 in developed countries, developing countries and the whole world

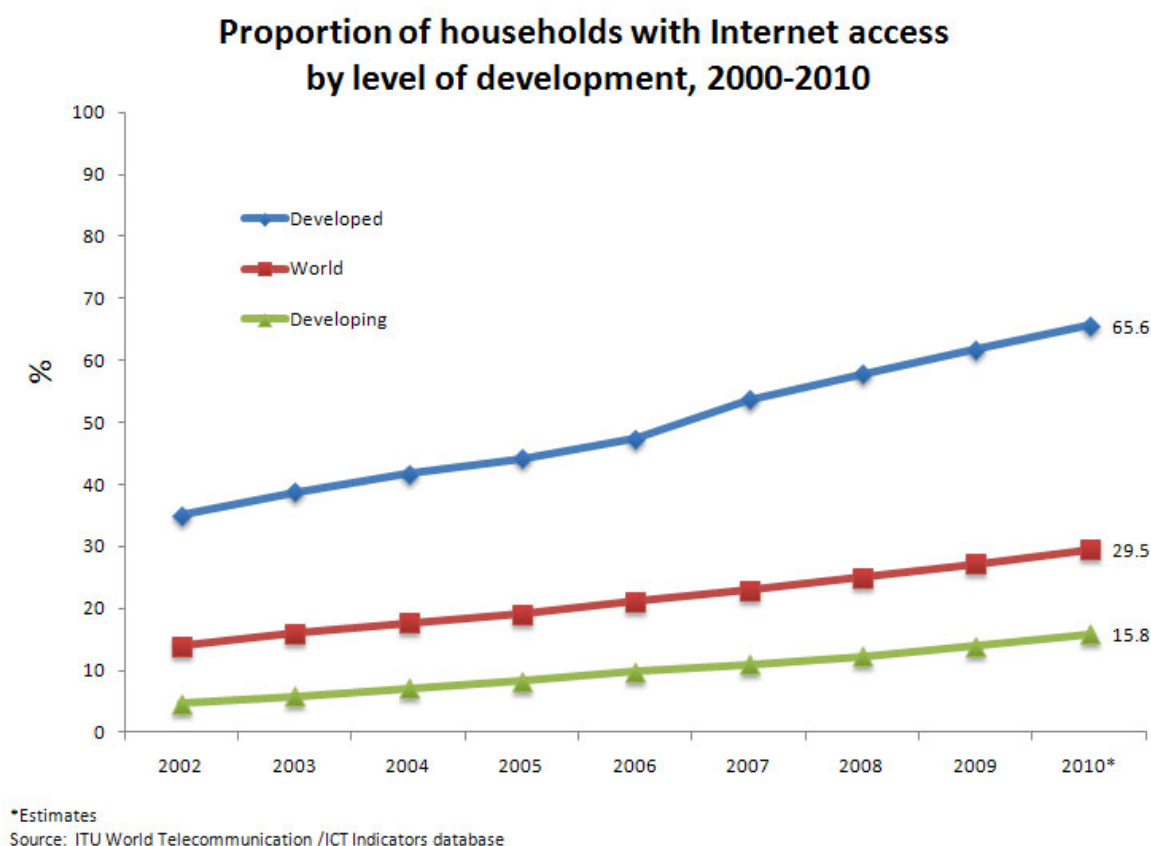


Fig. 5-3: Proportion of households with Internet access from the year 2000 to the year 2010 in developed countries, developing countries and the whole world

For the following chapter, the amount of people using telephone and Internet in sub-Saharan Africa is of specific relevance. Unfortunately for this chart, the ITU does not provide detailed numbers on that specific region. The numbers for the whole continent Africa compared to other regions of the world already speak for themselves. Considering the fact that Northern Africa has a higher development status than sub-Saharan Africa²⁰, one can imagine that the specific numbers for the focus region of this paper are even ranked below.

Fixed telephone lines	2005	2006	2007	2008	2009	2010
Africa	1,4	1,5	1,5	1,5	1,5	1,6*
Arab States	9,3	9,5	9,9	10,2	9,8	9,4*
Asia & Pacific	15,5	15,9	15,8	15,2	14,5	14,0*
GIS	23,0	24,9	25,8	26,3	26,4	26,6*
Europe	45,2	45,0	43,5	42,6	41,4	40,3*
The Americas	32,8	31,7	30,7	28,9	28,5	28,1*

Tab. 5-6: Habitants that have access to fixed telephone lines by geographical region

²⁰ This has for example been shown in chapter 4.3.2.

Mobile cellular subscriptions	2005	2006	2007	2008	2009	2010
Africa	12,3	17,8	23,3	32,1	37,6	41,4*
Arab States	26,6	38,7	52,1	61,3	73,3	79,4*
Asia & Pacific	22,5	28,6	36,4	45,6	55,8	67,8*
GIS	59,7	81,9	96,4	113,0	128,6	131,5*
Europe	91,0	100,5	111,1	117,7	118,5	120,0*
The Americas	52,9	63,0	72,4	81,9	89,3	94,1*

Tab. 5-7: Mobile cellular subscriptions by geographical region

Estimated Internet Users	2005	2006	2007	2008	2009	2010
Africa	2,2	3,0	3,6	5,9	8,8	9,6*
Arab States	8,0	10,6	13,8	16,9	20,5	24,9*
Asia & Pacific	9,5	10,7	13,6	16,6	19,5	21,9*
GIS	10,7	12,9	18,4	25,2	35,7	46,0*
Europe	45,9	49,4	54,7	59,0	61,8	65,0*
The Americas	36,3	39,2	44,8	46,3	50,4	55,0*

Tab. 5-8: Estimated Internet users by geographical region

Fixed broadband subscriptions	2005	2006	2007	2008	2009	2010
Africa	-	0,1	0,1	0,1	0,1	0,2*
Arab States	0,3	0,5	0,9	1,2	1,7	2,3*
Asia & Pacific	2,2	2,7	3,3	3,9	4,7	5,7*
GIS	0,6	1,3	2,3	4,5	6,1	8,7*
Europe	10,8	14,6	18,3	20,6	22,2	23,9*
The Americas	7,2	9,1	10,9	12,4	13,5	15,5*

Tab. 5-9: Fixed broadband subscriptions by geographical region

Mobile broadband subscriptions	2005	2006	2007	2008	2009	2010
Africa	-	0,1	0,3	1,0	3,0	3,6*
Arab States	0,1	0,2	0,8	3,3	6,2	9,7*
Asia & Pacific	1,2	2,3	3,4	4,5	5,7	7,1*
GIS	-	-	0,7	1,8	19,5	25,9*
Europe	3,9	9,0	17,8	25,9	35,3	46,3*
The Americas	0,4	1,4	6,2	10,3	16,4	24,2*

Tab. 5-10: Mobile broadband subscriptions by geographical region

In conclusion, the data shows that there was an immense difference in the availability of ICTs between the *developed* and the *developing* world at the beginning of the century (see the first three figures).

Most significant within the first tables is that the number of fixed telephone lines even declined within *developing* countries, while the number of mobile subscriptions rose exponentially (see tab. 5-7). This trend can also be seen in the ten-year period, as the graphics shows (see fig. 5-1).

The latter numbers are especially interesting in the light of this research paper as they show the current situation in Africa. The amount of fixed telephone lines remains more or less constant, while the amount of mobile phones nearly quadrupled. The same trend can be seen by Internet users, where the estimated amounts of users have more then quadrupled in half a century. However, this still is with less then 10% of the whole population far beyond European or American numbers (see tab. 5-8).

Using those numbers for an indication for the future, it can be said that the digital gap will be narrowed. What cannot be said is if the availability of ICTs in Africa will continue to be exponential rather than linear compared to Europe for example, which results in the following finding: According to the number of users of ICTs provided by the ITU, the digital gap is likely to decrease but unlikely to vanish in the coming years.

5.2.3 Fighting the Divide on various (theoretical) Levels

The gap between having and not having gained another facet, and this has not been unnoticed by international organisations, as the research towards that issue in the previous sub-chapter indicates. Forthcoming is a description how three big organisations deal with that issue:

United Nations

The United Nation approached the digital divide by two leading conferences – planned and organised after the UN general assembly endorsed in the resolution 56/183 on the 21st of December 2001 the holding of a *World Summit* in two phases (see: UN, 2001).

The first phase of the ‘*World Summit on the Information Society*’ (WSIS) was held in Geneva from the 10th to the 12th of December 2003. First, it had the object to foster a clear statement of political will of its participants, and second, it had the goal to take concrete steps to establish the foundations for an information society for all. The summit, at which then secretary general Kofi Annan held the opening speech, was, along with related events, attended by more than 11.000 participants from 175 countries (see: UN, 2006).

In its declaration’s final principles of this first conference, the existence of the uneven distribution of ICTs was recognised. The 10th principle of the declaration for example reads as follows: “*We are also fully aware that the benefits of the information technology revolution are today unevenly distributed between the developed and developing countries and within societies.*” Furthermore, the digital divide was directly mentioned, but considered as a problem that could be overcome, as the principle further states: “*We are fully committed to turning this digital divide into a digital opportunity for all, particularly for those who risk being left behind and being further marginalized*” (UN, 2003).

Two years later, from the 16th to the 18th of November, the second summit was held in Tunis (Tunisia) – this time with an even bigger amount of participants. More than 19.000 representatives from international organisations, the private sector and the civil society attended (see: UN, 2006).

The summit was originally planned in two phases, and no third world summit has been held since. The years after the second summit went by without major projects or changes. Apart from annual WSIS May meetings, their homepage does not provide much information on progress on the matter. At the WSIS forum in 2010, held from the 10th to the 14th of May, all WSIS stakeholders agreed on a new format as a result of open consultations (see. itu.int, 2011c; Accessed 03/02/2011).

How this new format influenced the 2011 WSIS forum and what the outcomes of this meeting are, cannot be said as at the time this chapter was written, the forum, scheduled for 16th to 20th May 2011, has not taken place yet.

The World Bank

Another global institution that is dealing with the issue of the digital divide is the *World Bank*. In its *Working paper no. 12*, published in early 2004, several aspects of how Information and Communication Technologies can contribute to economic growth, are listed (Grace, Kenny, & Zhen-Wei Qiang, 2004).

Starting with a statement how communications and economic growth are related to each other and how this relationship is theoretically supposed to work, the authors refer to sectoral effects such as reduced transaction costs of business and capital accumulation as a fundamental factor to economic growth and opportunity. Interestingly, even the World Bank lists three concerns about the role of the Internet in developing countries despite the broadly positive outlook:

- # The Internet might act as technology of divergence; the spreading of ICT's will create losers as well as winners.
- # Due to the growing digital divide, the rural poor are especially vulnerable and might be left behind in the race to build an '*Internet economy*'.
- # Implementing reforms of the ICT sector plus using ICT's as part of reform program in other sectors is very complex and therefore prone to failure (see: Grace, et al., 2004, p. 45).

In a more recent publication on the ICTs, *Working paper no. 176* published in 2009, the *World Bank* focuses, according to the authors, for the first time on a topic that has been neglected so far – Information and Communication Technologies for women's socioeconomic empowerment (Melhem, et al., 2009).

The paper states that the advancement of ICTs has brought new opportunities for knowledge sharing as well as knowledge gathering for women and men; but while the knowledge society advanced on one hand, on the other hand gender and social divides based on pre-existing divisions deepened. The following four topics summarise the main constraints women face in countries of disproportionately lower income compared to men:

- # Access and use of ICTs: Social and cultural factors limit women's access to ICT facilities such as Internet cafes. They often become meeting places for young men and therefore deter women's adoption and absorption of ICTs to access information and knowledge.
- # Usability and literacy: Education in science and technology is still considered a male domain in many cultures; on top of that an estimated two third of worldwide illiterate people are female.
- # Development and design: A lot of the content on the Internet has neither been developed to address the needs of girls and women in developing as well as in developed countries, nor is it available in languages they speak.
- # Leadership and power: In developed and developing communities alike, women make up only a small percentage of the top leadership on boards of directors and "C" level business leaders – which has a significant impact on economic development (see: Melhem, et al., 2009, pp. 3 - 4).

European Union / European Commission

The European Union and its partner organisations also saw the need to fight the digital divide. Providing one example of how further development in terms of communication technologies was seen around the turn of the last century, the following statements were made at a workshop named '*The challenges of the digital divide*', supported amongst others by the European Commission, the Austrian Development Agency, the Research Institute for Applied Knowledge Processing in Ulm and the Federation of Austrian Industry (see: Schauer & Radermacher, 2001).

This specific publication has been picked because one chapter is focussing on challenges in how to improve communications in Africa, stating that there are two main interrelated issues: First, the regulatory environment including its policy needs to be improved; and second, the physical communications infrastructure needs to be improved as well. As for the future development of the African Information Society, the authors suggest that upcoming programs would have to consider "*(...) the need for strategic collaboration between private sector, civil society and government; linkage to regional, national and international levels; the need for*

support by the highest level of government; and for measuring the impacts of information technologies” (Schauer & Radermacher, 2001, p. 7). The same paper even comes up with three concrete suggestions on how to make development operational on the African continent:

Developing Web sites that provide the needed information, thereby being user-friendly and interactive, providing quick online advisory service.

Setting up village info-stalls or info-kiosks that can bring information and knowledge to the people.

Developing IT packages that contain information on the best practices for agriculture, water harvesting schemes, cooking, technologies, irrigation and more (see: Schauer & Radermacher, 2001, p. 8).

The importance of the matter not only for developing countries, but even more for education and prosperity in Europe itself, is demonstrated by the summary of the speech of Viviane Reding, then-member of the European Commission responsible for and culture at the University of Bonn on the 7th of March 2001.

Reding emphasises the transition of Europe towards a knowledge and information society, thereby unleashing the forces of innovation and growth which Europe has in abundance. She further refers to the digital divide as a divide within the European countries and across the Atlantic, which can be closed if everybody²¹ participates in this transition, implemented by life-long learning and a reinforced and renewed social agenda as structural and long-term ventures (see: Reading, 2001).

5.2.4 The Gender Gap

The gender gap is a topic that could just as good be the focus of the research – the gender gap in relation to New Media / ICTs. It will only be described by a few statements to complete the chapter, but it shall be noted that it is becoming major issue within the discussion on having and not-having.

²¹ „Everybody“ relates to the then 15 member states of the European Union, which Reading illustrates in her speech as *‘just like 15 rowers rowing that boat on a turbulent sea’* that must act together in order to cross with confidence (see: Reading, 2001).

In the *World Bank Working paper no. 176*, it is stated that in the mid-1990ies, the United Nations already recognised the growing influence of ICTs on development and within that context the importance of women's participation in discussions about its global integration. As a result, a gender working group with the idea to address the significant gender issues, from access to control, was established. This further resulted in a report released in 2002 that focussed on ICTs as a tool to advance and empower woman. This was produced by the 'United Nations Division for the Advancement of Women' (DAW), the International Telecommunication Union (ITU) and the UN ICT Task Force Secretariat (see: Melhem, et al., 2009, p. 8).

The importance of the gender issues was further emphasised by the UN and therefore found its way into the '*Declaration of Principles*' of the already mentioned *First World Summit on the Information Society*. Principle 12 states that the UN is "...committed to ensuring that the *Information Society enables women's empowerment and their full participation on the basis on equality in all spheres of society and in all decision-making processes. To this end, we should mainstream a gender equality perspective and use ICTs as a tool to that end*' (UN, 2003).

In her latest publication in the year 2008, US-based social scientist Bridget King disagrees with this opinion, as she comes to an additional finding in her research project: The original intention of her research was to find out the differences in technology access, use and skill, based on race and ethnicity; the random sample was survey of over 103.000 respondents. The key result of this study was that "*Gender is not a factor in access, but in age, income, education, race, ethnicity and location matter*" (King, 2008, p. 109). Since the random sample included only citizens of the United States of America, where the demographical situation cannot be compared with the situation in developing countries, the relevance of those findings for this paper with a focus on sub-Saharan Africa can be neglected.

Regardless of King's findings, what shall be considered is the conclusion of the above quoted article by Samina Melhem representing the *Word Bank*, as it summarises the current situation and shows the danger if the gender gap within communication cannot be overcome: "*Women's full participation in the knowledge society is indeed a necessary condition for*

development to take place. Conversely, the lack of participation by women will slow progress and negatively impact families and communities” (Melhem, et al., 2009, p. 13).

5.2.5 Fighting the Divide – selected ‘Hands on’ Examples

What the paper has shown so far is a more or less across-the-board opinion that the digital divide exists and that it needs to be fought. It further showed theoretical concepts and ideas how that divide can or could be bridged, but has not shown actually implemented projects on the matter. The following examples shall give an indication of concrete ventures that aim at narrowing the gap:

Satellite IP applications:

This was one of the projects that were listed in the proceedings of the *Second World Summit on the Information Society* in 2005; presented by the Jean-Christophe Honnorat, project manager on distance training for health by Alcatel space (UNESCO, 2005):

The initial point of the project reflects what has been shown so far: On one side, there is a lack of connectivity (especially in developing countries); on the other side, there is a very young population that needs to be educated, cured, informed and trained. This connectivity handicaps are reflected by neither sufficient nor easily accessible infrastructures and skills for most of people, mostly due to large territories, low density and weak financial investment power. So what has been introduced is ICT for capacity building, or to be more precise, ICT and satellite solutions as a unique answer to this problematic.

Main characteristics of satellites are the wide coverage (already one satellite can provide worldwide coverage), high bandwidth and quality of service and security. Therefore satellites can homogenise connectivity and interoperability, and can provide a wide range of applications, such as content distribution, web based working and learning, streaming, videoconferencing and virtual classrooms, and collaborative works.

These advantages are illustrated by three particular cases:

Remote staff medical training and support: The reference medical institutions are based in

Nice (France), the participating organisations are local hospitals in the mountain area. By video streaming via the satellite, training, tele-consulting and second opinions are transferred from the centre to remote areas.²²

E-education for civil protections: The distance training centre provides applications such as interactive distance learning for firemen or access to pedagogic content on risk. Again that information is streamed via the satellite - the ones to be educated follow in virtual classrooms at different locations.²³

Inter-continental deployment for the ‘focolare movement’: In September 2003, the ‘*focolare movement*’ (an international organisation with religious roots) had a major meeting in Rome. By live-stream provided by a satellite connection, other groups of that movement in the US, South America and Europe, that physically could not attend, could still follow live via screen. Additionally, the event was off-line streamed to two locations in sub-Saharan Africa.

Due to the mentioned arguments, the author concludes that this project will be successful and closes with some recommendations on how it can be implemented (Honnorat, in: UNESCO, 2005, pp. 49 - 53). Unfortunately, the article neither mentions its costs nor the financing options of that specific project.

One laptop per child (OLPC):

According to their homepage, the mission of the project is to “(...) *empower the worlds poorest children through education*”, implemented by a rugged, low-cost, low-power, connected laptop (laptop.org, 2011; Accessed 14/08/2011).

OLPC is an initiative of the MIT-medialab founder Nicholas Negroponte, and follows the tradition of helping people to help themselves, believing in the philosophy that economic development of a region can be achieved best and most enduring by providing education for the population. In regions where people are forced to work at a young age (children and

²² It has to be added that the project was in the pilot phase at the time the proceedings were published – with foreseen but no further named extensions to Europe and Africa.

²³ Just like the previous example, the project is still in the pilot phase at the time writing, with foreseen extension to Eastern Europe, Asian and Mediterranean countries.

adolescence), a concept of effective education (assuming that enough political stability is given and a basic education system does already exist) provided by only a few years of schooling was needed (olpc-deutschland.de, 2011; Accessed 14/08/2011).

This is implemented by a laptop that has to fulfil a couple of features: Low-cost, taking extreme weather condition such as high heat or humidity, easy field repair, local language support, long battery life, flexible design (for use as laptop, e-book reader, and as a gaming option), as well as easy connectivity. On top of that, the laptop should last for at least four years. The result was the ‘XO laptop’, which, according to the project itself, “(...) *is durable, functional, energy-efficient, responsive and fun*” (laptop.org, 2011; Accessed 14/08/2011).

The success of the project is still under discussion. On the one hand, it got a lot of positive response from NGOs and official organisations like the United Nations. It was Kofi Annan himself, who along with Nicholas Negroponte unveiled the first prototype of the laptop at the *Second World Summit on the Information Society* on the 16th of November 2005. The then secretary-general of the United Nations then stated: “*The 100 \$ laptop is inspiring in many respects. (...) It holds the promise of major advances in economical and social development*” (Annan, in: mit.edu, 2005; Accessed 15/08/2011).

On the other hand, companies like Microsoft or Intel criticised the project (for other reasons than the obvious that neither Microsoft nor Intel were involved in the planning or production); but even governments of developing countries placed their criticism. Uwe Afeman, former member of the board of directors of the group ‘*Informatics and the Third World*’, said that education institutions in developing countries often lack infrastructure, the few teachers they have are often not well educated and even worse paid. Changing these circumstances would be more important according to Afeman than providing computers (see: Afemann, 2011) .

If duration is seen as a factor of success, then the project can be considered successful – the first version of the laptop (XO-1) was introduced in 2005, followed by the current XO-1.5, which charges faster and has a more powerful processor than its predecessor. In 2012, a tablet version named XO-3 is scheduled for production. Additionally, more than two million children and teachers already use XO laptops – by this number alone the success of OLPC cannot be undervalued (see: laptop.org, 2011, p.; Accessed 15/08/2011).

Preview: The ‘Voices of Africa Media Foundation’ (VOAMF)

This project also fits that category and uses a device that is by far cheaper than a satellite and of wider use than a laptop: The mobile phone. What the project does, how it works, how it is financed, and most important in the light of the paper - how it delivers its share on fighting the divide – that all will be demonstrated in detail in chapter 6.

5.3 Distinguishing the Gap: The Content Divide

As already shown, the concept of the digital divide was discussed from the mid-1990ies onwards. Mark Warschauer states that this was the same time where the Internet and the dot.com boom were under way. People wanted to be connected at all costs, the ones who were not connected were left behind. Then, at the tail end of the dot.com boom round the turn of the century, technology stock exchange values dropped massively, but the underlying information surged on. Along with the decline of people earning big and quick money on the web, this burst of the dot.com bubble has put a different perspective on the digital divide.

Warschauer describes the phenomenon as a “*shift from a focus on a digital divide to social inclusion*”, and it is, according to the author, resting on three main premises: A new information economy and network society that has emerged; ICT that will play a critical role in all aspects of the new economy and society; and the access to ICT that can help to determine the difference between marginalisation and inclusion in the new socioeconomic area (see: Warschauer, 2004, pp. 11 - 12).

This chapter does not discuss this new socioeconomic area as a whole but will focus on one specific aspect. The less-widely used term ‘content divide’ that can be interpreted as one of the outcomes of the shift in thoughts. The wording gained its ‘popularity’ after being used at the *First World Summit on the Information Society*, as the following paragraph will show.

5.3.1 Content Divide as stated by Kofi Annan

The First World Summit has already been mentioned in chapter 5.2.2. Kofi Annan, then secretary-general of the United Nations, held a speech on that 10th of December 2003, in which he stated that the digital divide actually contains several gaps in one:

A technological divide, which becomes manifested by great gaps in infrastructure.

A content divide, which, according to Annan, looks as follows: “*A lot of web-based information is simply not relevant to the real needs of people. And nearly 70 percent of the world’s web sites are in English, at times crowding out local voices and views*”.

A gender divide, with woman and girls enjoying less access to information technologies as men and boys (adding that this can be true for rich and poor countries alike).²⁴

A commercial divide, where e-Commerce is linking some countries and companies even more closely together, while others run the risk of further marginalization.

On top of these four gaps, the secretary-general said that there are obvious social, economic and other disparities and obstacles that effect a country’s ability to take advantage of digital opportunities, without naming those in further detail. He closed his speech with the appeal to build an open, empowering society, knowing it is a social, economical and ultimately political challenge (see: Annan, 2003).

5.3.2 Content Divide – Review and Follow-up

This speech by Kofi Annan was not the first time that the then secretary general spoke about the digital divide. On the 17th of May 2001, the ‘*World Telecommunications Day*’ was held. Annan sent a message, highlighting that there is a digital divide, described that phenomenon as great disparities in Internet access across geographical regions. He illustrated that by the example that there are more Internet hosts New York as in all of Africa. Annan closed his note with the following appeal to work together since the world became increasingly interconnected: “*On this day, let us commit to that task, and let us make our efforts a bridge that spans the ;digital divide*” (Annan, 2001).

²⁴ A further separation on the digital gender divide can be found in the *working paper 176* of the *World Bank*, already mentioned in chapter 5.2.3: Access divide, usage divide, content’s availability and utility divide, information technology labour markets divide, and an divide in access to ICT education at all levels (see: Melhem, et al., 2009, p. vii).

Davis Foulger, associate professor at the Oswego State University in New York, based his abstract presented at a symposium on the digital divide on Annan's statement – and introduced seven sets of obstacles (Foulger calls them 'bridges') that need to be overcome in order to overcome the digital divide. One of these bridges relates to the content divide:

In order to understand Internet content, Foulger claims that a second grade reading level is the minimum requirement. A high illiteracy rate as found in many countries is the first major problem. Even if people are able to read and write, the next problem appears - the language. English is the dominant language of the web, other major languages are also to be found. If one cannot read English or one of the other languages that are commonly in use in the Internet, the content of most web pages will be inaccessible (see: Foulger, 2001).

Despite this presentation, it seems like Foulger has not coined the term 'content divide', since it is mainly found in literature after the WSIS speech in 2003. The statement by Kofi Annan followed a background note, published already in October 2003 by the Office of the High Commissioner for Human Rights. Coming from a human rights approach, in particular referring to the articles 19, 29, 7, 12, 27, and 26 of the Universal Declaration of Human Rights²⁵, the note identifies cultural and linguistic diversity as one of six specific policy issues related to information and communications technology in the context of human rights. It reads as follows: *"The Information Society is characterized by a 'content divide' between developed and developing countries, with an under- representation of local languages, local contents, and local cultures. ICTs can advance cultural diversity and multilingualism through the creation and dissemination of local contents and cultures"* (ITU, 2003, p. 4).

If the information society will change the impact on the implementation of human rights for all in a positive way is not said – on the contrary, it is written that the information society will have a dramatic impact – for the better or the worse.

The most current up to date publication by the UN on the digital divide / content divide as follow-up to the WSIS conference at the time writing is the brochure on the 2010 WSIS

²⁵ The mentioned articles are on the following topics: Freedom of expression and right to seek, receive and impart information; prohibition of discrimination; the right to privacy; the right to a standard of living, adequate for the health and well-being of himself and of his family as well as the right of education. The detailed information how those specific articles of human rights are connected with the information society can be found at the ITU homepage (see: OHCHR, 2003, p.; Accessed 06/02/2011).

forum, held in Geneva from May 10th to May 14th. In total three debates evolved around ICT and content:

One debate at the conference was on development of accessible content for people with disabilities; a second debate was on ICTs for human rights with a focus on new social networks in less developed countries, and how cultural and linguistic diversity based on local content can be achieved; and the third debate with content relevance was on rural farmers and entrepreneurs in Bangladesh and the therefore need based content that is delivered by different ICT channels (see: ITU, 2010, pp. 29, 49, 54). Although two of those three debates focussed on developing countries, content and ICTs, the ‘content divide’ in the manner it was addressed by Kofi Annan in his speech in 2003, has not been approached.

5.3.3 Bridging the Content Divide - ICT's as Solution?

Literature states various aspects on and how the digital divide can be decreased or even overcome. When going into detail on finding out whether ICTs could be a tool to overcome the content divide, current literature provides far less information (as already seen in the previous chapter, where even the United Nations does not give any indications if the impact of ICT's on society will be for the better).

Balthas Seibold for example structures his thesis along the ‘*Least developed countries report 2007*’ published by the ‘United Nations Conference on Trade and Development’ (UNCTAD) and considers the content divide as only one of three aspects within an ‘Innovation divide’ – along with a ‘language divide’ and a ‘digital power- and ownership-divide’. He examines the digital divide as an innovation barrier, which focuses, in relation to development issues, on the aspects of relevant topics in relevant (local) languages, communicated by adapted digital systems. A solution how those local contents shall be produced and financed, and how the consumers can gain confidence in that content, is, according to the author, unknown (see Seibold, in: Dabrowski & Aufderheide, 2009, p. 259).

Mandi Maodzwa-Taruvinga from the University of the Witwatersrand, South Africa, also realises that issues of access often dominate the discussion of the use of ICTs, especially when this is related to Africa. In his reality, the access to computers and Internet is variable

depending on the socio-economic background and the location of various institutions (see: Maodzwa-Taruvinga, 2010, p. 4).

The outmost concern for the author is not the digital divide but the content divide, raising the question who the Internet providers are and where they are located. Furthermore, who the form and the content of ICT media determines; as well as the level of integration ICTs have within the aspects of teaching and learning. Maodzwa-Taruvinga stresses the importance of ICT in educator professional development. When educators are able to engage with ICTs at a most advanced level to develop and disseminate content that is relevant and appropriate for the African context, then a good beginning is made.

The question by whom, why and for what purpose current content on the Internet is created, is inevitable for the author. What educators in Africa should rather do is *‘(...) to move beyond a passive response to active knowledge construction to reflect their contexts and orientations to professional knowledge while developing skills in multi-modal approaches’* (Maodzwa-Taruvinga, 2010, p. 5).

After these thoughts from an African scientist, Shahid Uddin Akbar delivers the following perspective. Akbar, a regional coordinator of a ICT4D unit in Ahmedabad, western India, describes the following facets that content should have and do within projects of providing information to rural areas in India (Akbar, 2006):

Understanding the local requirement i.e. areas and issues underlying the content.

Using the local language.

Establishing a mechanism to update content and to collect feedback.

Using alternate technologies to develop the content.

Designing a convenient medium to deliver the content.

Developing a system to integrate diversified content or for bundling of content.

Enhancing knowledge of operators at the field level so as to enable them to understand

the value of content.

Focusing on providing a robust connectivity and infrastructure.

That list has been developed after realising that many initiatives neither address the core issues of rural livelihood, nor were local needs assessed properly. The author claims that many of that ‘supply driven’ initiatives are based on hypothetical models (see: Akbar, 2006).

Those arguments are relevant not only for India, as the following chapter will show, where a project based in sub-Saharan Africa will be analysed in detail.

5.4 The Mobile Phone – delivering Content of Relevance

“The mobile phone has a bigger impact on Africa than colonisation” (Amin, in: Grosskurt, 2010, p. 40). This quote by Salim Amin, chairman of A24 Media, an independent pan-African news and information channel, might be a bit overstated, but describes how the mobile phone contributes to Africa’s mobile revolution. In 1995 a total of 600.000 mobile phones were in use in sub-Saharan Africa; not even 15 years later, in 2009, the number surpassed the mark of 300 million mobile phone owners. This makes the mobile phone infrastructure the only reliable structure in terms of reaching almost everywhere instantly – and therefore absorbs all services for which this is helpful (see: Grosskurt, 2010, p. 40).

The following chapter provides selected examples of how the mobile phone can help to overcome not only the digital divide but also the content divide since the delivered content is created especially for the targeted audience in developing countries.

5.4.1 TxtAlert

TxtAlert is one of four products by the ‘Praekelt foundation’, named after the founder Gustav Praekelt, who along with Robin Miller set up the organisation in early 2007. According to their webpage, this was done *“(...) in response to the opportunities created by the rapid and unprecedented spread of mobile phones across Africa”* and claims to have reached over 15 million people across 15 countries in sub-Saharan Africa (praekeltfoundation.org, 2011b; Accessed 15/08/2011).

The product is situated in the health sector, where studies are starting to indicate that mobile technologies are an option to enable greater efficiency and access to services. This mobile technology tool sends automated, personalised SMS to patients who are on chronic medication, with reminding content. It further allows patients to reschedule their appointments if they are not able to attend or if they have missed an appointment. In addition, a ‘please call me’ message system is included, which allows contact with a doctor or a clinic even if the patient has no phone credits left on a prepaid mobile.

These functions might not seem very impressive to a reader of a developed country at first sight, but gains significance when taking a closer look. The program sends ‘Anti-Retroviral Treatment’ (ART) reminders to patients, where discontinuing treatment can result in resistance to their medications. It can further be used to send any other medium or long-time treatment reminders; and the foundation is currently introducing a tuberculosis as well as a ‘prevention of mother to child transmission’ protocol with various partners for TxtAlert (see: prackeltfoundation.org, 2011a; Accessed 15/08/2011).

5.4.2 M-PESA

According to its homepage, M-PESA was originally initiated by a partnership between the global communications company ‘Vodafone’ and ‘Safaricom’, a leading mobile network operator in Kenya as an *“Innovative mobile transfer solution that enables customers to transfer money”*. Again, that does not sound like something new to one coming from a developed country where nearly every adult is used to withdraw cash with a card from a machine in the wall or a bank branch, but the key to its impact for developing countries lies in the following sentence: *“It is aimed at mobile customers who do not have a bank account, either by choice, because they do not have access to a bank or because they do not have sufficient income to justify a bank account”* (safaricom.co.ke, 2011; Accessed 15/08/2011).

The system works as follows: Person A wants to send some money to person B. Therefore person A visits any M-PESA agent (which are more widespread than any bank in the country), and gives cash to that agent. The agent then transfers that money in equivalent value as credit on the mobile phone. This credit or value can then be sent via this phone to any other mobile phone user in Kenya (in our case person B). This person B can then transfer this value

back to real money, again at any M-PESA agent in the country at low costs – the recipient pays up to 170 Kenyan Shillings, which is the equivalent of about £ 1.25 Sterling (see: safaricom.co.ke, 2011; Accessed 15/08/2011).

In a study on financial literacy of developing countries published in February 2009 by the OECD, it is stated that in many parts of Africa, more than 80 percent of the population do not have access to basic financial services (see: OECD, 2009, p. 10). This is what makes the project so revolutionary – access to money sent over far distances without the need of a bank account and without paying the high fees that financial transaction service companies such as ‘*Western Union*’ would charge.

5.4.3 Frontline SMS

Another project that looks simple at first sight but has major potential to narrow the content divide is ‘Frontline SMS’. Ken Banks, a British social anthropologist, turned the concept into a project proposal in partnership with Karen Hayes and Simon Hick in Somerset, United Kingdom in 2005. The project does something rather basic – it is a piece of software installed on a computer that allows sending text messages amongst large groups of people to anywhere where a phone signal exists.

The last line is where the trick is hidden: An Internet connection is not needed, the software works by connecting devices such as cell phones with a local number. Once the software runs, messages can be send to wide groups of people and also collect the according responses, all via text message.

This text messaging system was exclusively created to overcome the lack of communication options in developing countries to support grassroots non-governmental NGOs. Most NGOs have computers and mobile phones available; so it only needs software (FrontlineSMS) to enable instantaneous two-way communication on a large scale – thereby being easy to implement, simple to operate and free of charge (see: frontlinesms.com, 2011b, p.; Accessed 16/08/2011).

Under the tab ‘case studies’, the webpage of the project lists examples where it has already been successfully used. Following case studies show selected implementations.²⁶

Combating food insecurity in Northern Kenya: A consortium named ‘Infoasaid’ including the ‘BBC World Service Trust’ and ‘Internews’ are using FrontlineSMS to send weekly information about livestock and food commodity prices from the most important market in Isolo, Northern Kenya, to field workers in rural communities. Then they then post that information on local notice boards. On top of that price information, updates on rainfall, outbreaks of animal diseases and de-stocking programmes are provided.

Family planning in India: In this case, the ‘Georgetown University Institute for Reproductive Health’ (IRH) is using FrontlineSMS to empower women by providing accessible reproductive health information in a pilot project in the cities of Lucknow and New Delhi. The participating females receive a SMS when they have their fertile days, calculated by a program that identifies days eight to 19 as such fertile days. The participating women then shall avoid unprotected sex. The concept is still in its testing phase, and since the article was published in July 2011, no further results of the success are known yet.

Malaria outbreak simulation in Cambodia: This was not a case that actually happened but a simulation, set up by the George Mason University, Washington DC. At a university course, the students built a simulation around an already existing case study of tracking the spread of malaria in Cambodia. In that existing case, a non-governmental health organisation named ‘the malaria consortium’ uses FrontlineSMS to send alerts and map ‘day 3-positives’ (72 hours from the first intake of anti-malaria-medication, it is crucial to take another blood slide to determine the disease) in real-time on Google Earth. By doing so, the spread of malaria can be mapped in detail and endangered communities can be alerted.

Market information in Tanzania: In this project, a local radio station named FADECO

²⁶ For detailed information on the introduced individual projects as well as further projects, one can refer to the homepage of FrontlineSMS: <http://www.frontlinesms.com/aboutthesoftware/case-studies/>

Radio, near Lake Victoria, uses FrontlineSMS mainly as agricultural information tool. Local farmers send their request via SMS to the radio station, where the messages are managed via FrontlineSMS. The reporter at the radio station (actually a one-man-show, as the reporter is also the person that set up the station and maintains it) then forwards the question to agricultural experts or tries to answer them himself by searching the Internet, and then broadcasts this answers on his radio show as well as via SMS to all people who have subscribed. Mostly the questions concern things that happen in centres where rural farmers are not always able to attend, such as market prices for their produced goods. This brings an advantage to the remote farmers as it means that they can sell their products when conditions for them become favourable.

Fair price for gold in Panama, Colombia and Ecuador: The *Choco bioregion* stretches from Panama through Colombia into Ecuador and is beside its biodiversity famous for a valuable mining resource: gold. The gold is mined by the local population deep in the thick jungle, with hours to walk to get to the nearest village. This is where two local community councils set up a program to inform artisanal miners on the daily, London fixed price for gold via FrontlineSMS. This means that the miners can get legitimate deals when selling the precious metal to buyers that come to the region since they are informed about the actual international value of the precious metal.

Crowd-seeding system in Eastern Congo: The Columbia University in Eastern Congo carried out this project with the following approach: Atrocities in developing countries are often unnoticed by the international community for one main reason: The lack of accessibility, which usually results from bad infrastructure; on top of that actual fighting makes it too dangerous to get close and therefore information on assaults does not get through. In this pilot case, three persons in each selected participating village got a mobile phone and sent information via FrontlineSMS of attacks and abductions as well as crop diseases and floodings to a centre where all information was collected. From there the messages were translated (they came in English, French and Swahili), kept in a database and captured in weekly bulletins. Unfortunately, the University of Columbia bowed out from the project at the time the according article was published (May 2011) and information on further financing could not be found (for all case studies, see: frontlinesms.com, 2011a; Accessed 16/08/2011).

These examples close the predominantly theoretical chapter on the digital divide and one of its facets, the content divide. The relevant terms are now set, selected facts on the origins and the development of the digital divide as well as the content divide have been shown. The following chapter will approach the issue of the having and the not having, the knowing and the not knowing, the ones that have access and the ones that do not, by a project that is currently operated in five sub-Saharan African countries.

6. A new Approach of Journalism to overcome the Content Divide?

The previous two chapters gave, with exception of selected practical examples, an overview on theoretical approaches. This chapter highlights a practical example in greater detail. It analyses a project that might have found a possible way of how the content divide can be decreased. The approach of the Netherlands-based organisation named ‘Voices of Africa Media Foundation’ (VOAMF), which is at moment active in five Sub-Saharan African countries, reads as follows: *“We encourage talented Africans to play an active role in reporting about their communities by taking advantage of new media”* (voamf.org, 2010c; Accessed 07/01/2011).

The first sub-chapter on the VOAMF (chapter 6.2) describes how the organisation is structured and how it is financed, and will further introduce its approaches and its goals. Most of that information is taken from one single source, the webpage of the project itself.²⁷

The then-following sub-chapter (chapter 6.3) will to examine if the project actually has the potential to overcome the content divide by a new form of local journalism. By a content analyses carried out according to the therefore created codebook, a data set will be generated. The obtained data will then be brought in relation to the third research question in the last sub-chapter.

Before going into detail on the specific project, the following pages are dedicated to the functions of media to place the then-following results into a theoretical framework.

6.1 Prelude Two: What is (Mass) Media good for?

Describing of how media works and how it influences our society by all colourful facets is a topic for a diploma thesis by its own. Now following is a basic and general overview what (mass) media does, and what its functions for society are, before focussing on a specific aspect: Local journalism and its role in the ‘web 2.0 society’.²⁸

²⁷ One has to keep this fact in mind, as the project itself is likely to write quite positive about their own doings.

²⁸ A detailed definition of the ‘web 2.0 society’ is given in the upcoming chapter 6.1.3.

6.1.1 Relevance of Mass Communication for Humanity and Society

Already mentioned Roland Burkart considers the question on what the communication process and the existence of modern print and electronic media represent for mankind and society just as old as the process itself - and until today, it has not been sufficiently answered (see: Burkart, 2002, p. 177). He then refers to three current perspectives on the matter:

The impact of mass communication is first one is the perspectives, which the author considers as the area with the most empiric results within communication science, since it has a long tradition within the field. This also results in the disadvantage that those results often controvert themselves.

This finding could already make one think why to continue there when there are no facts most scientists agree on (see: Burkart, 2002, p. 177). Matthias Kurp quoting Winfried Schulz gives the answer to that question, since, according to Kurp, there is a statement most scientists coming from all different approaches can agree on: Communication is impact (see: Kurp, 1994, p. 110).

The second of Burkart's perspectives highlights *the interdependency between mass media and modern industrial societies*, which can especially be seen by the professional organised flow of information.²⁹

The third and last perspective is on *the function of mass media and its benefits for the (further) existence of our society* (see: Burkart, 2002, pp. 177 - 178). This third perspective is due to the possible impact of locally produced content as stated in the research questions of special interest to this paper and will therefore be presented in greater detail than the first two perspectives:

Niklas Luhmann, originator of the sociological systems theory, made his thoughts on the matter. He states that if one wants to find out about the social functions of mass media, a general differentiation between operation and observation has to be made. Operation is

²⁹ Although this perspective does not focus on societies in developing countries, it can not be neglected, as most of the research on media originates and is based on industrial societies.

according to Luhmann “(...) *das faktische Stattfinden von Ereignissen, deren Reproduktion die Autopoiesis des Systems, das heißt: die Reproduktion der Differenz von System und Umwelt durchführt*” (‘The de facto occurrence of happenings, the reproduction of those happenings is the autopoiesis of the system, meaning: the reproduction of differentiation of system and environment’). From this point of view, the author states: “*Die Funktion der Massenmedien wäre demnach nicht in der Produktion, sondern in der Reproduktion zu sehen*” (‘The function of the mass media is not to be seen in production, but in representation of the public sphere’) (Luhmann, 2004, pp. 169, 183).

In his book on local journalism, Norbert Jonscher gives a less abstract and more detailed listing of the functions of mass media that Luhmann does (Jonscher, 1991).

He lists the political functions according to Hermann Meyn, which are information, participation in the opinion building process, and criticism and controlling of the executive forces, legislative authority and judiciary. Then Jonscher refers to a listing of Rudolf Wildenmann and Werner Kaltefleiter who name the function of information (assured facts, transfer of comments and statements), the function of articulation (presentation of the multifaceted opinion of the population toward the political establishment) and the function of criticism (content and staff criticism as well as criticism of the political style).

These political functions are completed by the social functions, which are rooted in the publications of Franz Ronneberger and are split up into the following topics: Social orientation, socialisation, and socio-integration of the recipient; and finally recreation of the readers and listeners by entertainment as well as education and political literacy (see: Jonscher, 1991, p. 47).

Heinz Pürer (Pürer, 2003) also closely refers to Franz Ronneberger, but presents a slightly different listing. This model will again be described in greater detail for two reasons: First, Pürer is found and quoted more often in according literature than Jonscher is; and second Pürer’s theses have been published in 2003, more than a decade later than Jonscher’s thesis – at a time, where new media / ICTs had a significant higher impact than in the year 1991.

Pürer follows the separation in political and social functions. The most important political functions are:

Construction of publicity: Mass media allows an exchange of information between organisations and institutions on one side, and citizens on the other side. By doing so, transparency is generated.

Political socialisation and integration: Individual citizens shall learn and refresh their role as state residents (such as voters, members of a political party, opponents or protestors) by the media.

Critique and monitoring:³⁰ Mass media shall execute an all around monitoring with a focus on political decisions (finding and controlling standards) as well providing transparency of the economical and cultural system, including the mass media itself.

Political education: The individual shall be able to absorb and understand political information to further generate opinion and decision literacy on political issues.

Beside those, seemingly normative, apparent functions stand the social, seemingly latently functions:

Socialisation: This function derives from the overall supply of media and is twofold:
On one side, media should transfer thinking patterns and behaviours for the individual in a society; and on the other hand it should transfer of norms and values within the whole society.

Social orientation: By communicating environmental knowledge, the individual should gain the possibility to find orientation in a modern, highly civilised society.

Recreation: The demand of society towards mass media is to contribute to the relieve and distraction of its members (see: Pürer, 2003, p. 426).

³⁰ This is the only sub-function where Pürer does not quote Ronneberger.

Before closing this sub-chapter, one further amendment has to be made. All those models can only be applied on or work within democratic systems. When there is no political opposition to a political system, when there is no freedom of press, those models are all obsolete.

6.1.2 Special Functions of Local Journalism

From the big topic of function for the society as a whole, the matter is narrowed down to a specific aspect that is one of the initial points of the research: Locally produced content and its impact on the local community (and beyond). But why has local content a specific impact? Where does its special meaning, impact, relevance, importance, interest come from?

It is again Matthias Kurp who provides an answer to this specific question: Our modern and highly complex, social political and economical highly sophisticated societies are getting more and more internationalised – along with that, the interactions are becoming continuously anonymous. As a counter reaction, the local neighbourhood gets more attention by local individuals. Relating this local world with its media, two main aspects can be seen: First, only in the local neighbourhood, individuals have the chance to direct, non-mass-media-transferred social experiences; and second, media as reference system constructs a social environment, to which individuals and social groups can relate their behaviour to (see: Kurp, 1994, p. 52).

That brings up the next question: Which channel is the most suitable to disperse news? The Buggles already sang in 1979 that '*Video killed the radio star*' – does this line apply for the publication of local news as well?

The Swiss journalist and university lecturer Hermann Schlapp (Schlapp, 1991) recognises this phenomenon as well, stating that radio and television changed the way news are published. On a national and international level, radio and television have replaced the newspaper. Radio for its relatively simple technique (therefore being the fastest medium) and TV since happening stories can directly be broadcasted. Considering that this statement is nearly two centuries old and the media structure / news structure has changed massively due to the Internet since then, the author's statement on the importance of local newspaper has to be contemplated.

The local newspaper is still the most important channel to transport information. It provides orientation to ones nearest and personal surroundings; institutions like political parties, local government agencies, organisations, companies, churches etc. need the local press to inform and to be talked about. Even if local radio stations or local TV stations exist, they cannot, at least on a quantitative level, cover what local newspapers can cover (see: Schlapp, 1991, pp. 11 - 14).

While Schlapp draws a quite positive picture of local journalism, one has to accept that there has always been criticism on that specific local way of providing information. Jonscher dedicated one chapter on history and development of local news coverage from the first local news in newspapers around the end of the 17th century up to now,³¹ and summarises that typical deficits have not only accompanied, but shaped local information for centuries. He considers the following reasons accountable (see: Jonscher, 1991, p. 97):

Insufficient specific education of local editorial journalists

Domination of economical interests from the publishing company

Miserable working conditions due to chronically staff and time shortage

Permanent influence from local elites as well as state organisations who either direct the content of news in their own interest or even completely suppress that content .

Krupp too comes to a critical result: He summarises that if local mass media misses stabilising structures, the content will become shallow and standardised due to economic and/or political pressure. In such cases, they “(...) *only multiply already prepared content, transfer dogmatised argument structures, reduce political perspectives to the version of local elites and participate rather to a distortion of local discussions than an expansion of the spectrum of public opinion*” (Jonscher, 1991, p. 365).

Also Kretschmar, Möring and Timmermann (Kretschmar, Möhring, & Timmermann, 2009) attest local mass media importance for the direct environment, although the Internet made it

³¹ „Now“ as already previously stated is the year 1991; another fact that has to be considered is that the author only refers to Germany-based newspapers.

possible to get information on worldwide happenings at any hour of the day. They refer to the local market as venue place where local news has been exchanged and then put forward that this physical market has vanished, replaced by local mass media that now informs on topics individuals did not recognise themselves.

In terms of function of local media, Kretschmar et al follow the same structure as Meyn has used. They divide into a political and a social function. Similar to already known authors, they declare the local part within a newspaper as a major part of that newspaper; as for regional and local subscription papers, the local news are the core of the publication (see: Kretschmar, et al., 2009, p. 31).

Anne Weibert has published an even more up to date research on the potential of local journalism. She compared the local news of two nations (the USA and Germany), focussing on the topic of minorities integrating into a society. Since her source material are four different printed editions of newspapers, the publication does not give any further findings that would be of major relevance to the following chapter where local reporting is carried out by digital devices. One statement that is worthwhile mentioning is that “*(...) journalist in Dortmund and Denver are within their work and their understanding of the profession bound to different journalistic contexts*” (Weibert, 2010, p. 62). This fact that is seldom seen in German literature as it is usually focussed on German speaking countries and the according approach towards journalism.

6.1.3 Local Journalism 2.0

The term ‘web 2.0’ is omnipresent when speaking about the Internet and how it can be used to generate, share and consume knowledge. Normally frowned upon in the scientific community, in this very special case the definition has been taken from the Wikipedia homepage, since Wikipedia is one the biggest phenomena of web 2.0 itself: “*The term web 2.0 is associated with web applications that facilitate participatory information sharing, interoperability, user-centred design, and collaboration on the World Wide Web. (...) Examples of Web 2.0 include social networking sites, blogs, wikis, video sharing sites, hosted services, web applications mashups and folksonomies*” (Wikipedia.org, 2011a; Accessed 26/07/2011).

According to Paul Graham, rated by BusinessWeek 2008 as one of the 25 most influential people on the web for his career, turning from computer programmer to author (see: TechTeam, 2008), the wording became known by a conference called '*the Web 2.0*' conference in 2004 (see: Graham, 2005). Following its definition, Web 2.0 seems theoretically like being made for local journalism – but does that concept work in journalistic reality?

Kretzmar et al share that thought, predicting that the printed newspaper will lose its importance but not completely vanish, because the knowledge of a regional editorial department and regional competence ensures its unique position. Furthermore, they argue that any future journalistic education has to contain four different points of focus: Print, video, audio and online.

According to the authors, the following new digital formats *blogs, local wikis, podcasts, SMS, and Web-TV* are considered as relevant for local journalism (see: Kretzschmar, et al., 2009, pp. 62 - 63):

Blogs: Dave Winer from the Harvard Law School defines weblogs as a hierarchy of text, images, media objects and data which is chronically arranged and can be viewed in an HTML browser. He claims that a weblog is a publication where ideas can stand alone without interference (see: Weiner, 2003).

Kretzmar et al grant blogs the option to access new information that would have not been accessible otherwise. For daily use within an editorial department, an own complex blog does only work on polarising and contrivers topics (see: Kretzschmar, et al., 2009, p. 62).

Local Wikis: Due to the nature of the topic, the definition of what a Wiki is, was taken from Wikipedia.org itself: "*A wiki is a website that allows the creation and editing of any number of interlinked web pages via a web browser using a simplified markup language or a what you see is what you get editor*" (Wikipedia.org, 2011b; Accessed 27/07/2011).

Winer distinguishes Wikis from blogs by stating that there is a lot of discussion on the similarities, but no definitions to compare them. If a Wiki is assumed as a weblog-like system

that allows anyone to edit it, he identifies the representation of many voices as main difference to a blog that usually presents the unedited voice of a single person (see: Weiner, 2003).

In Kretzmar et al's opinion, meaningful topics of a local Wiki are local politics, organisations and local culture; plus they need to be looked after by the editorial department or a media agency (see: Kretzschmar, et al., 2009, p. 63).

Podcast: The term "podcast" originates from the mix of the two words 'broadcasting' and 'iPod', Apple Computer's famous music player (see: Harvard.edu, 2011; Accessed 27/07/2011); Therefore the definition of what a podcast is has been taken from the Apple Website: "*A podcast is an episodic program delivered via the Internet using an XML protocol called RSS. Podcast episodes can be audio files, video files, documents, or any combination of the three. The publisher or broadcaster podcasts the program by posting the episodes and the XML document to a Web server. The consumer subscribes to the podcast using a client application, such as iTunes, which regularly reads the XML file and downloads new episodes*" (Apple.com, 2011; Accessed 27/07/2011).

This rather technical definition basically means that everyone who owns a computer with a microphone, plus is in possession of the technical skills, can produce media data (audio or video) that then can be consumed either by a computer or a portable music player device. Kretzmar et al consider podcasts as a suitable medium to reach the technique-cautious younger generation as it offers entertainment and information and can be accessed on demand. Possible content within local journalism could for example be hints of where to go out at the weekend, electronic columns, as well as reviews/outlooks on the week (see: Kretzschmar, et al., 2009, p. 63).

SMS: The description of what SMS is has been taken from t-mobile, one of the biggest providers of mobile communication services in the world, and states that SMS stands for 'Short Message Service'. It allows to send and receive alphanumeric text (see: t-mobile.com, 2011; Accessed 27/07/2011).

One SMS can reach many users – the potential users must have subscribed in advance, but then receiving is possible without much complex technical equipment. Therefore Kretzmar et al attribute the advantage of that system in its constant reachability of their clients: They can be held up to date due to the mobility of the medium at any time (in contrast to information provided by the Internet). SMS-news work best with clearly defined topics such as local news, local sport, local traffic information or local weather forecasts. In addition, local based services (lbs) can use local competence of local daily newspapers (see: Kretzschmar, et al., 2009, p. 63).

Web-TV: Marc Adam, executive director of ‘Microsoft Network’ (MSN), Microsoft

Germany GmbH, provides a definition of Web-TV, including a differentiation of ‘Internet Protocol Television’ (IPTV): While IPTV usually means subscription-based TV where consumers need a set-up box to watch content via their television, Web-TV usually means free TV-series and videos on the Internet that can be watched on a computer (see: Adam, 2008, p. 67).

Kretzmar et al furthermore give a few examples of German local newspapers on how this form of journalism can be realised – adding that web TV can be used to bridge the gap between the actual happening and the publication of the newspaper (see: Kretzschmar, et al., 2009, p. 64).

The following chapter bases on such a model of local journalism where content is recorded by mobile phones and then published on a webpage – differing by the fact that there is no printed version of the news. This is described in greater detail in sub-chapter 6.2.4.

6.2 The ‘Voices of Africa Media Foundation’

According to their homepage, the ‘Voices of Africa Media Foundation’ (VOAMF) is “*A young organisation that was founded in 2006 to take full advantage of technological advancements to contribute to enhancement of the media sector in Africa*” (voamf.org, 2010a; Accessed 09/01/2011). How that is done, by whom and who is paying for all that - the following chapters provide that information.

6.2.1 Preliminary Notes on the Data collected

When the first research was carried out for the thesis (Autumn 2010), African reporters of the project were active in three different countries - Ghana, Kenya, and Tanzania (including Zanzibar). Soon afterwards, a fourth country (South Africa) joined, then Uganda joined in January 2011. More countries are planned to be included.

The team member's names as well as the board were accurate when this chapter of the thesis was written (Spring 2011).

The reports on their website seem not to be the total of all reports produced and uploaded but already preselected³² – therefore this chapter does not claim to analyse ALL reports produced for the project but rather an analyses of the reports PROVIDED on the webpage.

The webpage itself seems to have minor technical problems, not all links actually contain the topic the rider of the page claims to link to; furthermore the homepage could not be reached twice for several hours during the research period.

To keep these distortive circumstances at a minimum, the present chapter was written in a compact amount of time (January to April 2011). The same fact applies to the reports analysed. They represent all reports that were found on the website within a one year period at the time the practical analyses was done, namely in April 2011 (plus the data from the pre-test, analysed and coded in March 2011).

6.2.2 Ownership, Staff, Partners and Founding

An official proof that it is a registered NGO (Non-Governmental Organisation) or a registered foundation according to national law cannot be found at the homepage – what is provided is an official office address and bank details in the Netherlands (Julianastraat 30, 2012 ES Haarlem) (see: voamf.org, 2010b; Accessed 09/01/2011). Further mentioned is the board, constituted of a chairman, a treasurer and five more persons (of which all of them seem to have media or development project background).

³² Within the URL of each report and after the title of the report, a five-digit number follows. The numbers of these reports are not following one another, but are within a similar range, which leads to the assumption that not all produced reports are published on the webpage.

The core team, which is responsible for fundraising, coordination and support of the project, consists of five people: Pim de Wit heads the foundation in the Netherlands as well as in Africa and is also the director; Henry Aalders is programme manager and therefore responsible for office operations; Olivier Nyirubugara (who originates from Rwanda and is currently PhD student for media studies at the University of Amsterdam) is senior coach and content coordinator, and within that position responsible for the training programme; Khamis Ramadhan is based in Nairobi (Kenia) and is responsible for training and technical support for East Africa; and finally Nana Kofi Acquah who is based in Accra (Ghana) and is also responsible for training and technical support.

The team is supported by a growing team of volunteers, of which five persons who all have a background in media or development projects, are individually mentioned (see: voamf.org, 2010e; Accessed 09/01/2011).

6.2.3 The Approach in Detail

According to the VOAMF webpage, three big topics define how the approach of encouraging talented young Africans to play an active role in reporting about their communities can be implemented:

Voicing communities: The foundation argues that African communities are underrepresented in media; therefore they are often only visible when calamities occur. Preparatory crucial factors in development and situations of conflict are considered to be day-to-day economic, political, social and spiritual dynamics of a community – and those are minimally or only subjectively highlighted in regular media.

VOAMF predicates that people within these communities understand the local opinions, contexts, hopes and worries best – in opposition to many NGO's and policy makers who depend on external information rather than hearing the local voices. And this is where VOAMF comes in – by providing communities a tool to voice their issues.

Empowering Youth: The VOAMF claims that youth in Africa faces limited career

opportunities and therefore young people move to informal settlements in large cities where the competition for employment is high. For this reason, the foundation supports and empowers youth in reporting skills (by providing skills and financial resources) in order to support young Africans to pursue a career as independent reporters in their own rural or urban community.

Using new Media: Interactive Communication Technology is considered to be an important area of development, offering Africans new opportunities to voice unheard community issues online. Recent technology trends in mobile Internet should help to do so (see: voamf.org, 2010c; Accessed 07/01/2011).

6.2.4 How Mobile Reporting is done

The technical equipment for the trainees is a mobile phone (advanced mobile cell phones with basic editing functions such as Nokia N73, N79 or E52), an external keyboard and a mouse. Individual video sequences are recorded via the phone; text, photos and videos are combined to create a multimedia-based report. Then the content is edited directly on the phone before either being uploaded to the Internet via mobile network of the mobile phone provider or via a regular internet connection (see: voamf.org, 2010d; Accessed 11/01/2011).

The advantage of creating and providing content via a phone, as the homepage states, is that “(...) *the mobile phone enables the most effective way of multimedia reporting that our society has ever known*” (voamf.org, 2010f; Accessed 11/01/2011). That statement is followed by this further outlined advantages on the same page:

Mobile reports can be produced in minutes and shared in seconds.

Particular relevance in areas that lack modern Internet infrastructure.

Low in cost compared to traditional reporting equipment.

Those three arguments are not subject of further analyses on the topic since the advantage of the mobile phone for developing countries has already been discussed in chapter 5.4. What has not been said yet is where the phones are coming from. The VOAMF webpage states that ‘Zonzoo’ supplies second hand advanced mobile phones.

When looking at the “Zonzoo” webpage, it is written: “*Uw ‘oude’ telefon is nog geeld ward. (...) Zonzoo koopt deze mobiele telefons, knapt ze op en verkoopt deze telefoons door in Azie en Africa (...)*” (‘Your old phone is still worth money. ‘Zonzoo’ buys them, fixes them up and further sells them in Asia and Africa’) (zonzoo.nl, 2011; Accessed 11/01/2011). If ‘Zonzoo’ (the page exists in Dutch language only but has its headquarter in Munich, Germany, and is a registered company – ‘GmbH’) gives those phones away for free or if VOAMF has to pay for the phones is not to be found - neither on the VOAMF page, nor on the ‘zonzoo’ page.

6.2.5 How to become a VOA Trainee Reporter

When looking at how one can become a VOA trainee reporter, the webpage explains that the trainees are selected from African communities that are underrepresented in mainstream media.³³ This happens locally by the regional coordinator in close collaboration with the local partner organisations. Preconditions for prospective trainees (who must be between 20 and 30 years of age) is a completed secondary education, oral and written English skills, a broad interest in the socio-economic situation of their home country and a certain level of computer literacy. A diploma or degree in communication/media and work experience is an additional advantage (see: voamf.org, 2010d; Accessed 31/01/2011).

Having been selected, the trainees follow an initial workshop where they learn the basics of mobile reporting. When acquainted with this specific technique of reporting, the trainees go back to their communities and start practicing by producing short video reports about various topics in their communities. Each report is published on the training website (<http://voicesofafrica.africanews.com/>) and the new community reporters then receive individual feedback via the free of charge voice over IP software ‘Skype’ or email by one of the professional coaches (African media professionals) working for the project. Trainees are expected to upload 50 reports as well as spending an average of two days a week on training assignments. The training assignments are developed by the VOAMF themselves – magazines and training DVD’s in English language are published twice a year (see: voamf.org, 2011d; Accessed 02/04/2011). After an average of six month, the trainees have completed their training.

³³ Further information how „underrepresented“ is defined are not given on the webpage.

6.2.6 Side Note: A Story of Success?

Although not directly relevant for answering the research topic of the paper, the question of success of the project remains – and is difficult to measure. One possible way of evaluating that is to look at how many of the trainees actually end up as journalists.

Unfortunately, the webpage does not give any numbers of how many trainees finally find occupation within the media field, but it does refer to their main partner ‘*Africa Interactive*’, a multimedia press- and content agency operating in Africa. This agency then shares one of its founders with the VOAMF (Pim de Wit) and therefore supports the foundation by providing resources and knowledge (see: africa-interactive.com, 2011; Accessed 17/01/2011). Africa Interactive is an online media company with a particular focus on Africa that initiated (amongst other projects) a news platform for African reporters named ‘*AfricaNews.com*’, which is, according to their own definition, “*The most compelling interactive African community, sharing news, photos, weblogs, videos, mobile reports the untold stories about the African people*” (africanews.com, 2011; Accessed 17/01/2011). The video reports that can be found on their webpage look very much like the ones made by the VOAMF training reporters, and also the design of the homepage looks quite similar.

What can be found in relation to employment of trainees on the webpage is a link to the ‘*alumni network*’ that was, according to the page, “*initiated to foster continuous learning and to simulate knowledge sharing as former trainees continue to work as freelance reporters*” (voamf.org, 2011a; Accessed 02/04/2011). Another indication of the project’s success could be the amount of people that start and finish their education. Six out of 29 reporters did not publish more than three reports during that one-year research period – not including the ones that apparently have only started reporting since their reports have been published on the webpage earlier than February or March 2011 as those reporters seemingly have just started. This would mean that more than 80 % have finished their education, which can be considered as success as well.

6.3 Collecting Data for the Research

In order to find out if the VOAMF project can contribute to bridge the content divide, the video clips on the web page were watched, analysed and categorised. Over all, 228 reports (all

reports published within one year, starting on the 12th March 2011) have been coded by the method of quantitative content analyses according to the therefore generated codebook that can be found in the appendix.

The next sub-chapter provides information on the quantitative facts and figures of the research, followed by explanations on how relevance, empowerment and gender are measured.

6.3.1 Quantitative Facts and Figures

A few reports don't have a classification according to the website at all, a few reports have been listed in two categories – the latter have been assigned according to the classification that seemed more appropriate.

14 reports on the topic '*governance*' with a upload date before 30th July 2010 could not be identified since the webpage then referred to the category '*health*' – therefore the amount of reports on that topic seems not to be the accurate number. Considering this fact, 56 reports covered the topic '*society*', 46 reports the topic '*economy*', 45 reports the topic '*youth*', 24 reports the topic '*governance*', 23 reports the topic '*health*', and six reports the topic '*environment*'. 36 reports had no categorisation topic-wise.

Out of the 236 reports published in total between 12th March 2011 and 10th March 2010, 104 were produced in Kenya, 54 in Tanzania, 25 in Zanzibar, ten in Uganda, ten in South Africa and one in Cameroon.³⁴ Two reports had no country of origin but referred to the whole continent instead. Seven reports (from 7th June 2010 until 3rd of June 2010) were apparently damaged and could not be analysed. One report had the same content but was listed twice under two different titles and was uploaded on different dates. That report was only analysed once.

A total of 29 authors submitted their reports on the webpage, of which 17 were male and twelve were female. Out of the 228 reports, male reporters have produced 136 reports and female reporters have produced 92 reports.

³⁴ Cameroon currently does not seem to have any trainees, as this was the only report from that country. The fact that the author of this one report carries the title „Voices of Africa alumni“ suggests that Cameroon had trainees before the surveyed period.

6.3.2 Measuring Relevance

The first two research questions circle around the term relevance – but how would one measure relevance? How can an author that has not been brought up (i.e. socialised) in the targeted countries distinguish what is or is not of relevance to the local population or the population of the country?

For this paper, relevance was categorised according to the following chart by Heribert Schatz and Winfried Schulz (Schatz & Schulz, 1992). It was originally generated within a publication presenting the results of a long-term study on mass communication in the year 1992 to find criteria and methods to measure quality in the dual TV system (public versus private), and defines relevance as one dimension of quality.³⁵

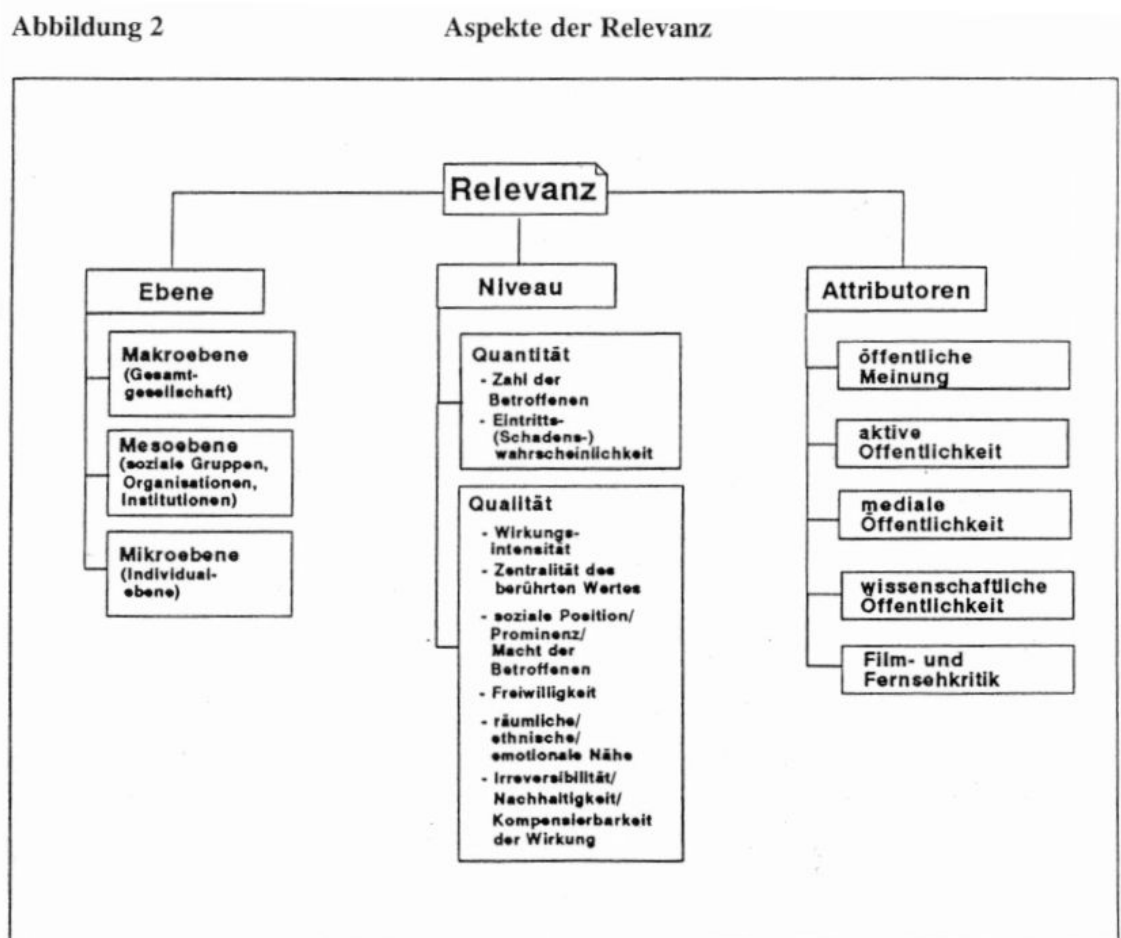


Fig. 6.A - Aspects of relevance according to Schatz / Schulz (Schatz & Schulz, 1992, p. 696).

³⁵ The other dimensions according to the authors are pluralism, professionalism and rightfulness/lawfulness.

The authors approach the term relevance by three different aspects: Level, standard and attributes.

Starting from the bottom, the smallest unit are the individuals (*“Mikroebene”*). Those individuals then themselves organise in social groups, organisations and institutions (*“Mesoebene”*) and are as such members of the whole society (*“Gesamtgesellschaft”*) – therefore social relevance of an article or a TV series or report can be assigned to one of the three levels.

The relevance standard (*“Niveau”*) is divided into two main groups: Quantity and quality. Quantity defines itself by the amount of people that are actually affected by what has happened (incident that has happened in the past) as well as probability of the incident (in the future). This category is easier to distinguish than the quality standards as it can be resolved by counting people involved.

When categorising the level of relevance by quality, Schatz / Schulz provide six differentiated topics: Intensity of impact (*“Wirkungsintensität”*): the higher the impact, the higher the relevance of the process caused; Centrality of the relevant topic (*“Zentralität des berührten Wertes”*): In western societies usually issues that endanger the physical existence of human beings; Prominence and power of concerned person (*“Prominenz/Macht der Betroffenen”*): i.e. an attempt to kill the pope is of more relevance to the public than an attempt to kill John Doe; Voluntariness (*“Freiwilligkeit”*): Was the protagonist forced into a situation or did it happen because he or she choose to do so; Nearness (*“Nähe”*): further divided into geographical closeness, ethnic nearness and emotional closeness; and last but not least irreversibility and sustainability of its impact as well as options of compensation of the caused (dis)advantages (*“Irreversibilität/Nachhaltigkeit/Kompensierbarkeit der Wirkung”*): As an example the difference of a HIV-infection vs. a cholera-infection – both endanger life, but the second one can be cured (see: Schatz & Schulz, 1992, pp. 692 - 700).

Social relevance of a TV program or a broadcast is, according to the authors, not as easily measured and categorised scientifically as it seems by level and standard. Due to the fact that norms, values and interests of individuals are different and that subjective personal

preferences not always follow logical rules, a third category (attributes), also divided in sub-categories, has been added.

The first sub-category public opinion (“*Öffentliche Meinung*”), also mentioned as “*passive public*”) seems to be difficult to measure, as it is unclear how this public opinion is created. Therefore the active public (“*Aktive Öffentlichkeit*”) could be considered as relevant instead – of especial relevance would be all issues and actions, that are considered and treated as relevant by active protagonists in political, economic, cultural and further systems. The third sub-category is the media public (“*Mediale Öffentlichkeit*”), which, in short, means that relevant is whatever mass media considers to be relevant – with the addition that mass media does not always act neutral since they have their own interests as well. A further category is the scientific public (“*Wissenschaftliche Öffentlichkeit*”), which states that it would be up to art and social sciences to preselect which topics are considered relevant, and then to pass those relevant topics over to the mass media. The last sub-category is film- and TV-criticism (“*Film- und Fernsehkritik*”) – setting international rules for quality standards as counterpart to journalistic, aesthetic and content-based descent of commercial television (see: Schatz & Schulz, 1992, pp. 700 - 701).

According to those aspects relevance was distinguished in the analysed video reports – knowing that those aspects of measuring have been discussed and adapted by further scientists.

Günter Rager for example also mentions relevance as one of four aspects to describe and judge quality of journalistic products (along with actuality, accuracy and placing). While Schatz and Schulz focus on television (which is of more relevance to this paper since video reports are used to measure relevance of news content), Rager’s approach is based on quality within all media. Most important is the author’s statement that ‘*quality in the dimension relevance is given when all relevant positions and the relevant protagonists are mentioned or even allowed to speak, and when all arguments are described*’ (Rager, 1994, p. 198).

Barbara Held and Stephan Russ-Mohl have made more current scientific thoughts on relevance in journalism. The authors modify an own definition from the years 1992 and 1994 (called the “*magic polygon*”), in which seven terms circle around the keyword quality assurance – relevance being one of them. When it comes to measuring relevance, the authors

refer back to Schulz published in 1990 (Held & Ruß-Mohl, 2004, pp. 55 - 56). No further own thoughts on relevance could be found in that publication.

The most actual statement to be found on the matter seems to be by Klaus Arnold. He grants relevance a special relevance within journalism, since reality cannot be displayed totally. It is the journalists that have to decide what the public sees. These selected tools are the same as Schatz and Schulz are referring to. The author further states that despite all individual differences, there is a collective allocation of relevance – primary based on two things: The possible outcomes within the society and the individual concernment (see: Arnold, 2008, p. 494).

Those three authors are listed to complete the chapter but have not been considered during the coding process in relation to the category ‘relevance’.

6.3.3 Measuring Empowerment

The third research question revolves around the term empowerment – and again, one is challenged by how empowerment can be measured. As shown in chapter 4.3.9, the term empowerment likely has its roots in the feminist movements. From this perspective, several aspects of how to measure it can be found.

One of them is introduced by Bina Pradhan (Pradhan, 2003) in an article published in the “*Development*” journal. According to her definition, the notion of ‘empowerment’ comes from “(...) *the need to enable woman to overcome those systemic sources of subordination and its implications on intervention strategies to enhance those powers of women and its sources to affect change*” (Pradhan, 2003, p. 51). On the following pages, she states that measuring this women’s empowerment is difficult by the conventional measures of power that is collected through quantitative data methods. Since her complex concept is purely based on female empowerment, it is not of much relevance for this paper.

A broader, cross-disciplinary and therefore for this research more appropriate approach can be found in the second chapter of the book “*Measuring Empowerment*”, edited by Deepa Narayan and published by the World Bank (Petesch, Smulovitz, & Walton, 2005, in: Narayan).

The following figure illustrates, according to Petesch et al, how the process of empowerment can be analysed by two factors: A change in the of the actor’s capacity to take purposeful actions (defined as “*exercising agency*”, which will be described later) and a change in the social, political and institutional context which defines the broader opportunity structure in which the actors pursue their interest in.

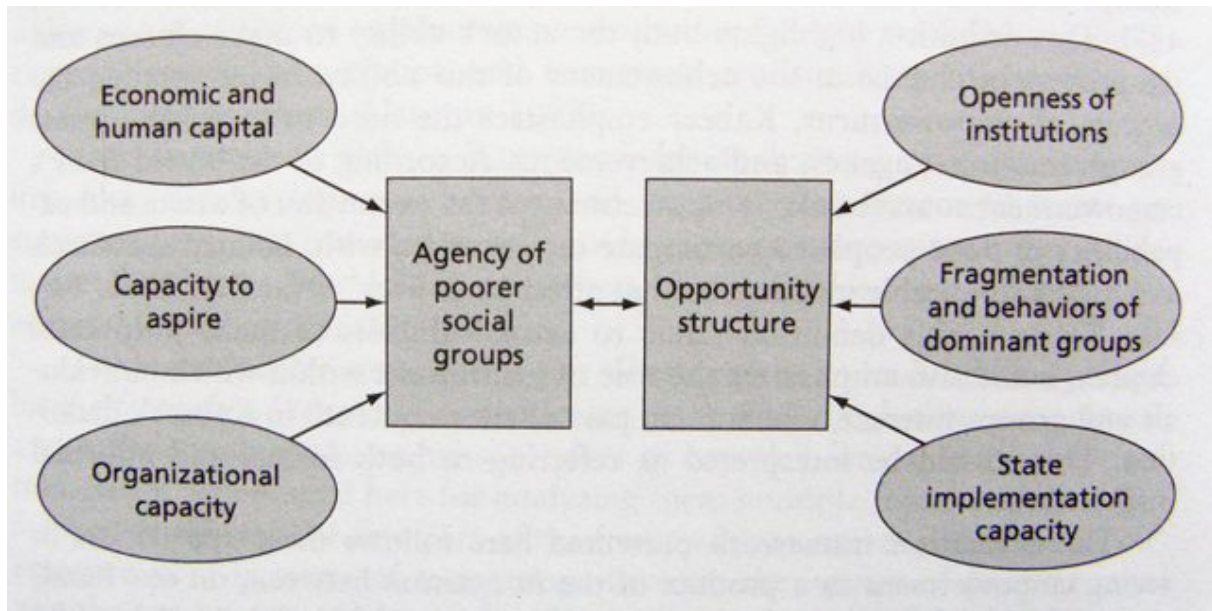


Fig. 6.B – A causal framework for empowerment in state-society contexts (Petesch, et al., 2005, p. 42).

“*Agency*” on the left side stands for the individuals (behaving as agents) when they can pursue purposeful courses of action that foster their goals, which can either relate to individual wellbeing or objectives that a whole group consider desirable. Three key factors influence the “*agencies*”:

“*Economic and human capital*” stands for the possession of economic resources, skills and good health. The more of such capital is possessed by individuals, the less is the dependency on others and the more individuals can make their own decisions.

The “*capacity to aspire*” relates to a culturally formed capacity of underprivileged groups to envision alternatives and to aspire to different cultures (culture in this case defined as something that concentrates on the future like a better life rather than something that focuses on the past).

“*Organisational capacity*” as third factor refers to participation in formal or informal organisations. According to Petesch, Smulovitz and Walton, it “*Enlarges poor people’s access to ideas, information, and camaraderie; strengthens their capacities for planning, decision making, problem solving, collective action, and conflict negotiation; and expands their ties to other networks and resources*” (Petesch, et al., 2005, p. 43).

The right side displays the “*Opportunity Structure*” that interacts in a powerful two-way influence with the “*Agency*” and is composed also by three main influences that shape the ability of individuals and organisations to participate, negotiate, influence and hold institutions accountable:

In the first factor “*Openness of institutions*”, institutions define the rules for social interaction, which can be formal or informal. Formal ones stand for explicitly defined, written and enforced rules, whereas informal rules are social norms, habits and routines, possibly imprecise and are not legally enforced on anyone.

“*Fragmentation and behaviours of dominant groups*” stands for the power, unity and behaviour of elites and other important non-poor social actors. Furthermore other important groups such as formal sector workers or the middle class is mentioned, although provided with less influence than in industrial societies. For special interest on the empiric part of this study is the statement that on a local level, elite capture can be an important problem, especially in more heterogeneous communities (see: Petesch, et al., 2005, p. 48).

Last factor is the “*State of implementation capacity*”, which refers to the effectiveness with which government authorities carry out policies that have been adopted. This consists of three sub-factors, namely the state’s basic bureaucratic capabilities (technical and management skills), the adequacy of financial and administrative resources for delivering services, and the ability to penetrate and rule different geographic areas and arenas of social life.

Since this model seems provides a relatively clear and simple categorisation of what can be considered as empowerment - the authors summarise empowerment as: *“Product of the interaction between the agency of these groups and the opportunity structure in which this agency is potentially exercised”* (Petesch, et al., 2005, p. 41) - the coding for “contribution to empowerment” has been done accordingly for the empiric part of the research.

6.3.4 Measuring Gender

Since the term ‘gender’ is subject of discussion (especially in social sciences), this paragraph shall explain what is meant by ‘gender-relevant topic’ in context with the third research question.

This thesis refer to the gender definition of the ‘World Health Organisation’ (WHO), the directing and coordinating authority for health within the United Nations System, and reads as follows: *“‘Gender’ refers to the socially constructed roles, behaviours, activities, and attributes that a given society considers as appropriate for men and women”* (who.int, 2011Accessed 11/01/2011). So when the clips where coded according to their ‘gender-relevant topic’, it was determined if the topic of the report was predominantly of interest to individuals that fulfil their role as women.

The last category in the codebook was the audience, where the difference between the general audience and a predominantly feminine audience was made. This wording again is based on the WHO definition, which states that *“‘male’ and ‘female’ are sex categories, while ‘masculine’ and ‘feminine’ are gender categories”* (who.int, 2011, p. Accessed 11/01/2011).

6.4 Summarising the Data

This chapter summarises the findings, illustrated by diagrams. The analyses of tables 6.4.1 to 6.4.3 are used to answer the first two research questions, while the analyses of tables 6.4.4 to 6.4.7 will give the indications to answer the third research question. Under the tables a short listing indicates what the abbreviations are standing for. The interpretations are to be found in chapter 7.2; the detailed matrix of the generated data is attached in the appendix.

Geographic classification:

As also stated in the codebook, the term 'area' stands for a local area of a country (for example the '*Mara area*', which is also described in some of the video reports as the '*Mara region*'. The mara area is one of 26 regions in Tanzania, bordering the republic of Kenya).

'Country' stands for the individually mentioned country in terms of state or nation.

'Region' stands for the wider geographical region, following the 'Geographical region and composition chart' of the United Nations (milleniumindicators.un.org, 2011; Accessed 07/01/2011). This leads to the following classification of the involved countries: Ghana, Kenya, Tanzania (including Zanzibar), Uganda: Eastern Africa. South Africa: Southern Africa.

Instructions for action:

'Instruction for action' was measured by analysing if the reports contained topics or content that had a 'now go out and do something' message for the audience.

6.4.1 Local Protagonists

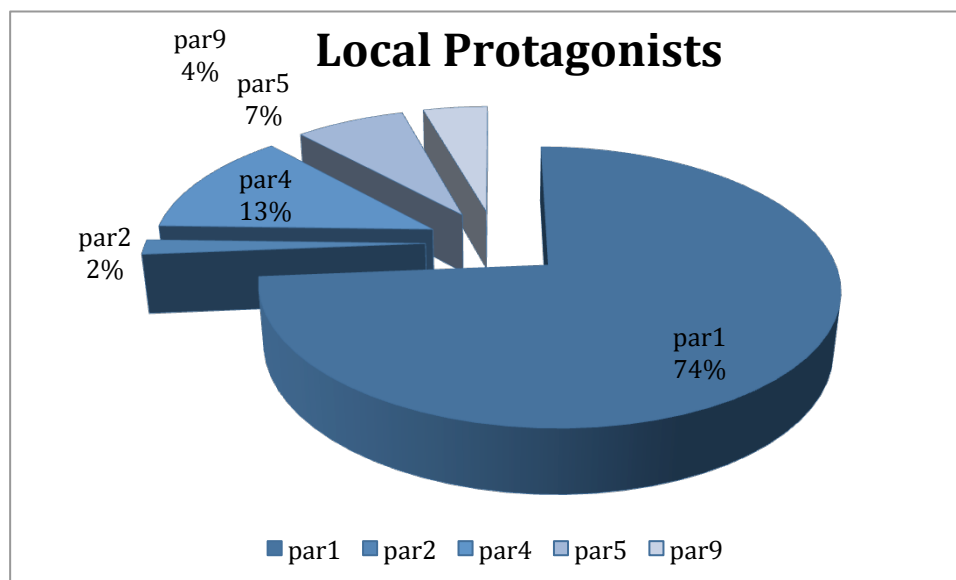


Fig. 6-1: Percentage of protagonists from that specific area / country / other countries

Par1: Local protagonists

Par2: Protagonists from different area

Par3: Different country only

Par4: Local protagonists and different area

Par5: Local protagonist and different country

Par9: no physical protagonists

The category of protagonists shows two significant results: First, 74 % of all reports protagonists come from the local area; and second only two percent of protagonists come from a different area of the country. Not even one report has protagonists that come from different countries only, with seven percent reports starring local protagonists and protagonists of different countries – which are mainly made up by either representatives of profit-orientated companies or members of NGOs.³⁶ The second biggest percentage is made up by reports with protagonists from the local area as well as from different areas of the country. Four percent of the reports do not have protagonists in terms of physical persons.

³⁶ The origins or aims of the participants of different countries have not further been analysed in the research.

6.4.2 Local Issues

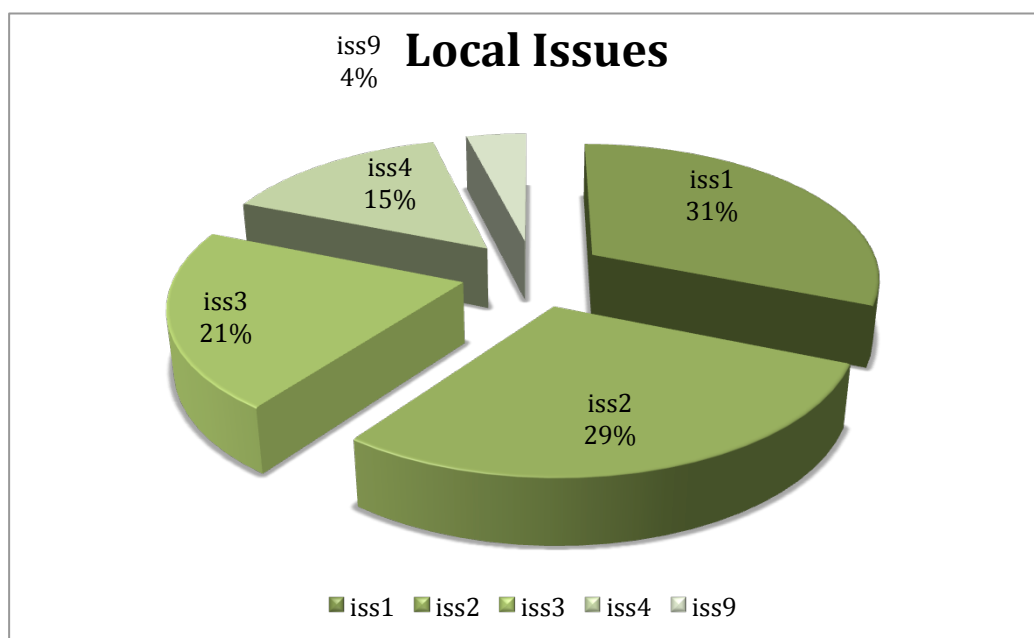


Fig: 6-2: Percentage of relevance of the issues for the local population and beyond

Iss1: Local issues only

Iss2: Predominantly local issues, minor countrywide issues

Iss3: Local and country issues

Iss4: Region issues

Iss9: No area issues

When looking at the issues, a more balanced picture compared to the protagonists can be seen. 31 % of the issues are of specific relevance to the area, 29 % of the reports are predominantly relevant for the area but in minor terms also for the whole country. 21 % of the issues have the same relevance for the area as they have for the country as a whole, and an impressive 15 % of the issues indicate to be relevant not only for the country where the report is made but for the wider region as well. Only four percent are of no specific relevance to the area where the report is recorded.

6.4.3 Target Group

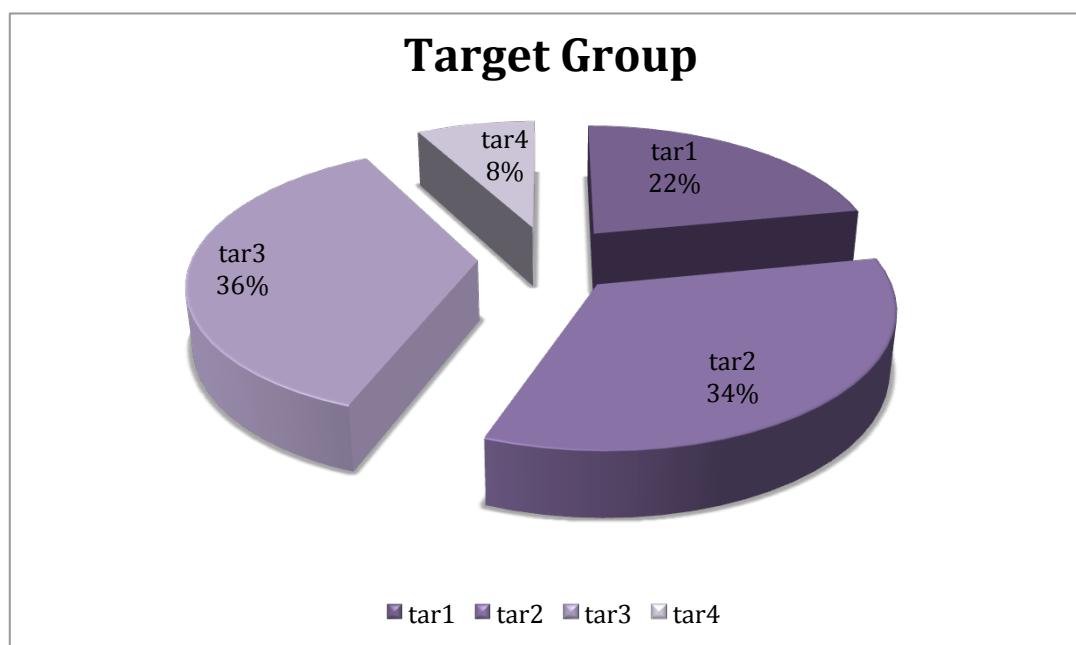


Fig. 6-3: Percentage of local / nationwide / region-wide targeted audience group

Tar1: Local population only

Tar2: Predominantly local population, minor countrywide population

Tar3: Predominantly countrywide population

Tar4: Region wide population

22 % of the reports only address the local population where the reports are made only. A bigger number, 34 % of the reports, predominantly address the local population but to a minor extend also to the population of the whole country. The biggest share, 36 %, captures reports that predominantly address a nationwide audience; and still eight percent of reports are made for an audience even beyond nation borders, i.e. the whole region.

6.4.4 Instructions for Action

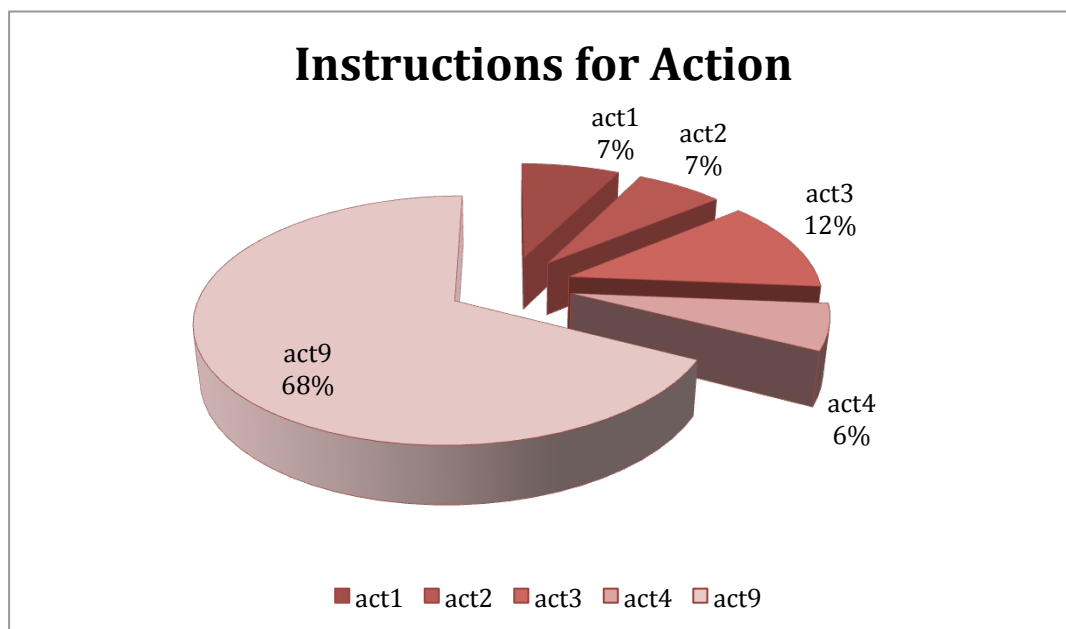


Fig. 6-4: Percentage of reports that addresses instructions for action for the local, national or the wider population

Act1: Local instructions for action only

Act2: Predominantly local instruction for action, minor nationwide instructions for action

Act3: Nationwide instructions for action

Act4: Region wide instructions for action

Act9: No instructions for action imposed

Other than the two previous categories, the category on instructions for actions shows a quite unbalanced picture. Seven percent of the reports address instructions of actions to the local population only, the same amount predominantly to the local population but in minor terms also to the population of the whole country. Twelve percent of the reports target their instructions of action to the whole population of the individual countries, and six percent suggest instructions of action for the population of the wider region. The by far biggest group with 68 % is the group of reports that do not propose instructions of action at all – an interesting result not only for this specific category but also in regards to the function of (mass) media, as it will be shown in the analyses in the following chapter.

6.4.5 Empowering Function

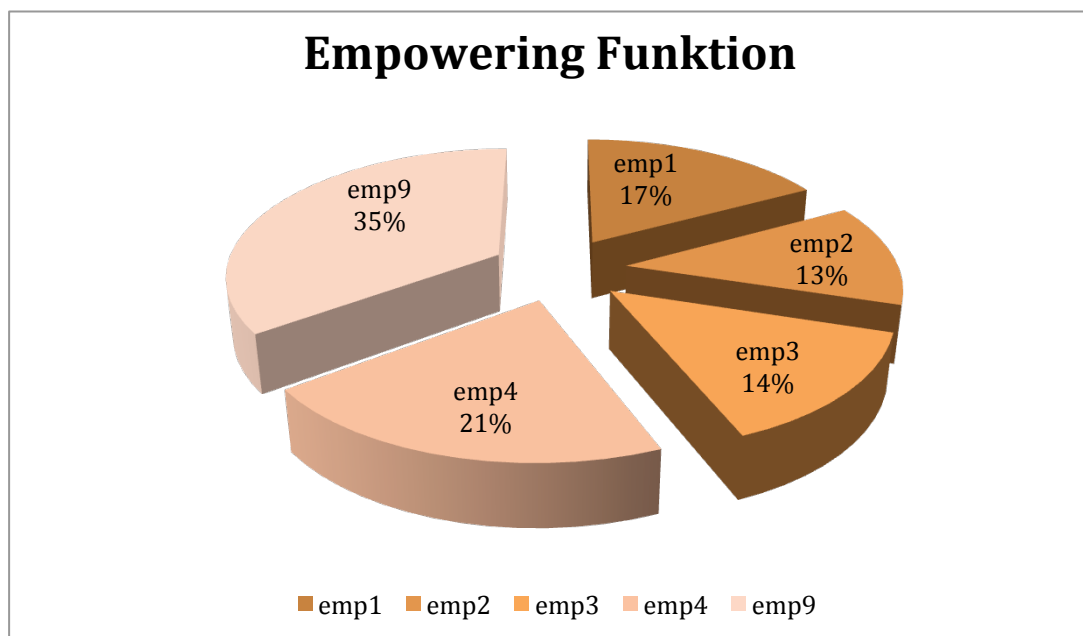


Fig. 6-5: Percentage of empowering topics or functions of the report in relation to the local area / the whole country / the whole region

Emp1: Local empowerment only

Emp2: Predominantly local empowerment, minor nationwide empowerment

Emp3: Countrywide empowerment

Emp4: Area wide empowerment

Emp5: No empowerment topics or functions

The category on empowering functions is the most balanced within the second research question. 17 % of the reports contain topics that contribute to the empowerment of the local area where the report is produced; the topics of 13 % of reports predominantly contribute to empowerment of the local area but in minor terms also to the country; 14 % of the topics contribute to the local area empowerment just as much as to the whole country's empowerment; and an impressive 21 % of all reports contain topics that contribute to the empowerment of the wider region (a surprising result in the light of the forth hypothesis as will be shown in the following chapter). The biggest group though, representing 35 % of all analysed topics, are reports without empowering issues.

6.4.6 Gender Topics

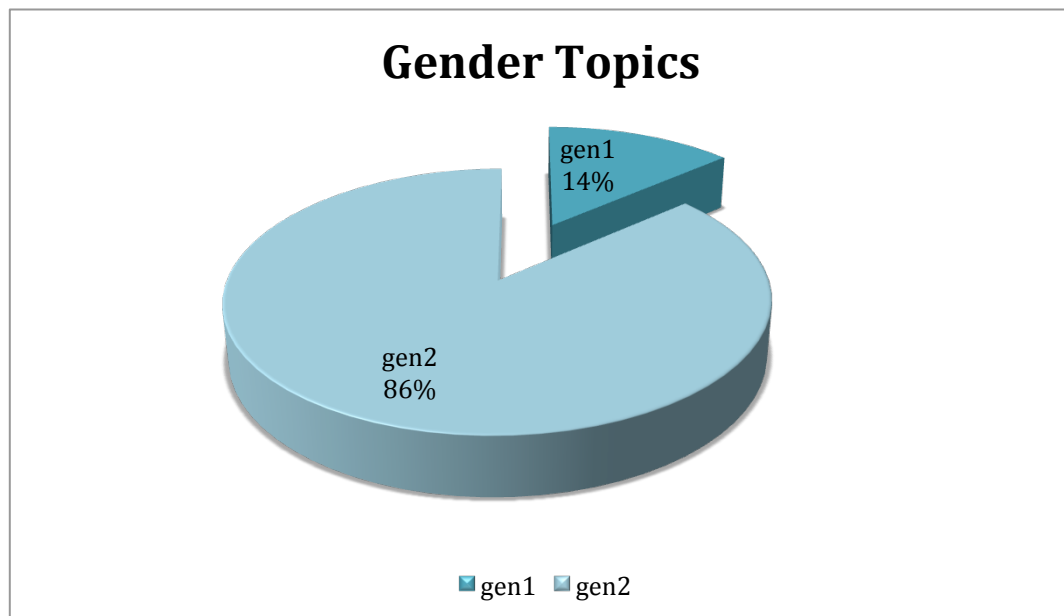


Fig. 6-6: Percentage of reports that contain a gender-relevant topics

Gen1: Gender-relevant topic

Gen2: No gender-relevant topic

The results on gender topic draw a quite clear picture. Only 14 % of all reports contain a predominantly gender relevant topic, leaving 86 % of all reports with topics that are of the same interest for the masculine as well as for the feminine audience.

6.4.7 Gender Target

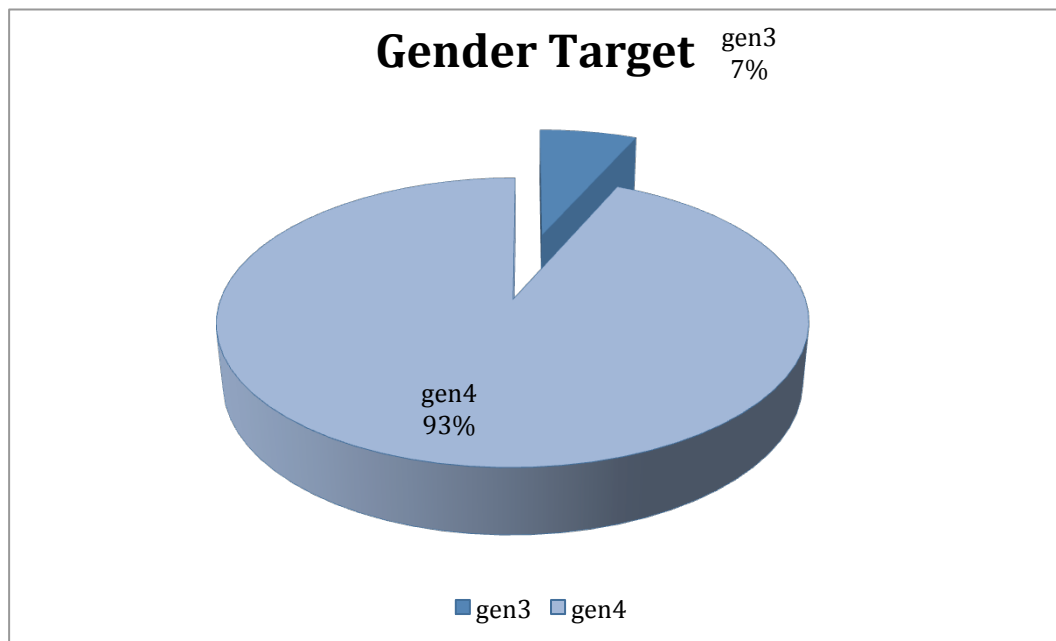


Fig. 6-7: Percentage of reports that predominantly address a female audience

Gen3: Predominantly feminine audience

Gen4: Feminine and masculine audience alike

The data on the gender aspect is the most significant one of the whole research. As just shown that only 14% of all reports have gender-relevant topics, even only half of that number, seven percent of the reports, predominantly address a feminine audience, showing that 93 % of all reports are targeted for a masculine and feminine audience alike.

7. Conclusion and Outlook

The first part of this chapter summarises the state of correct narration in the development context. This is accompanied with the statement why this research was not written based on one of the development theories, since they all seem to have failed. Further an explaining statement on why both wordings ‘New Media’ and ‘ICTs’ found its way into the title will be made.

The chapter continues with a short summary on the theoretical aspects of digital divide and if it is overcome yet; followed by the same approach and answer in regards to the content divide, also on a theoretical level.

The third part then is dedicated to practical approaches to overcome the content divide, followed by the VOAMF project from where the data of the empirical research of this paper has been taken. The research questions and hypotheses are also answered in detail in this chapter.

The chapter then closes with a personal outlook of how the issue of the content divide could develop in the nearer future.

7.1 State of the Art in Theory and Wording

There are good and bad news. Bad news first – as shown in the depiction of development theories in chapter four, they have to be considered as failed if we look at them not only as being able to explain why there are people who ‘have’ and people who do ‘not have’, but also on overcoming this gap between the having and the not having. The rich and educated became richer and more educated; the poor became poorer and larger in number – which is a change not for the better.

Also the wording has changed over the years. The ‘undeveloped’ or ‘underdeveloped’ became ‘developing’, the ‘industrialised’ somehow remained ‘developed’. The ‘Third World’, for a glimpse of history at eye level with the ‘First World’ when founded, quickly lost that spark of hope and is now renamed in ‘southern countries’ or simply ‘the South’, while the First World

is still pretty much still first world but has been renamed as well to make things look less uneven and is now running under the term ‘northern countries’ or simply ‘the North’.

When going into wording details in relation to technology, two main terms in literature can be found: ‘New Media’ and ‘Information and Communication Technologies’ (ICTs). One of the results of this research is that both terms basically mean the same, it is simply a matter of who, with which educational/scientific/cultural background, is using them. The wording ‘ICT’s’ is more likely to be used in technical terms by authors that have a natural science background, whereas the term ‘New Media’ is more likely to be used in cultural terms by authors that have a background in humanities or social sciences.

Focussing on this technology terms and bringing them in context with the technical and infrastructural change that has happened – this is where the good news are, as the following sub-chapter will show.

7.2 State of the Art as of implemented Projects

To put the actual situation in simple words – the developing countries are catching up. The technological gap between developed and developing countries is continuously getting smaller. Bringing the numbers as shown in chapter 5.2.2 back to memory, within a decade, the mobile phone subscriptions raised from some five percent in the year 2000 up to 65 percent plus ten years later. Looking that the number of Internet users for the same amount of time, one can see that it has risen from close to zero percent up to 20 percent plus per habitant, with the number of users expected to rise high.

The combination of better (and therefore cheaper) Internet availability in combination with a bigger amount of devices that can take advantage of the Internet, in particular the mobile phone, is where the really big potential of New Media / ICTs lies. Selected examples have shown how this potential can be used, especially if the projects are built around the specific needs of developing countries.

Those needs, when the therefore necessary infrastructure is provided, mainly regard the content that is transported or made available via ‘New Media / ICTs’. Developing countries face challenges that developed countries are often not even aware of, starting with simple

things like non-existing bank accounts, continuing with constantly changing prices for food and commodities up to health and diseases issues such as tuberculoses, malaria or contraception methods.

The just named assumption of provided infrastructure includes that the population of developing countries has access to information – not only in urban areas, but also on the countryside, in rural areas where fixed telephone lines are rare, newspapers are hard to get and radio is often the only source of information from the outside world.

This is where the analysed project ‘Voices of Africa Media Foundation’ comes in as an example of how the content divide can be overcome, as the following sub-chapter shows:

7.3 Results of the empirical Research

These are the results of the two research questions, generated by analysing 228 reports and coded accordingly to the therefore created codebook:

7.3.1 Relevance for locally produced Content

The findings for the first research questions are two-fold, and in relation to the second hypothesis, unexpected and surprising. The fact that three fourth of all reports revolve around local participants strongly indicates the relevance for local population rather than for people from somewhere else. Another finding that shall be mentioned in this context is that only seven percent of protagonists come from different countries – it seems that foreign people are not of much importance within the reports.

When looking at the issues, the result draws a different picture. While 60 % of the reports cover issues that are of specific relevance only or of predominant relevance for the area, more than a fifth of all reports are of the same relevance to the whole country. Even more significant are the 15 % relevance for the whole region. So although the reports have mainly local people involved, one third of the topics concern at least the whole population of the country, again a third of that share concern the population beyond nations borders.

The findings on the audience again points out a different aspect. Reports that were produced only for the local audience where the report was recorded, counts for 22 %, while the reports where the whole population of the country is addressed as audience, represents 36 %. The fact that eight percent of the reports are predominantly addressed at the whole region shows that an international crowd would be well off seeing those reports as well.

Summing these three categories up to answer the first research question, the findings exceed the hypothesis: Not only could the relevance for the local population be shown, also on a countrywide level the reports are of relevance to the population. Some relevance could even be shown for the wider region, considering the numbers one has to admit that this relevance is of minor impact.

7.3.2 Empowering Effects of locally produced Content

When moving to the second research question, the category of ‘instruction for action’ provides a simple answer: Two thirds of all reports do not impose any instructions, so an active part of participation (*‘go out and do something since you have seen the report’*) is reserved only for one third of the population - one has to mention that at least twelve percent of instructions of action are addressed predominantly to the whole population of the specific countries.

The arguably most surprising findings cover the topic of the empowering functions of the reports – taking into consideration that more than one third of the reports have no empowering topics. 44% of the reports contain topics that can contribute to empowerment on a regional or national level, and an astonishing 21 % of the reports show topics that can empower not only the local area or the country but the wider area as well.

The third category in that field, taken into the research because the origins of term ‘empowerment’ are strongly linked to research about and by females, was gender topic and target. The answers in this category are clearer than in all other categories: Gender topics do not dominate the reports by a long shot, and the reports do definitely not predominantly address a feminine audience.

In the light of the second research question, an empowering effect in relation to the origin or definition to the term cannot be seen. The reports are made to inform rather than to request or demand action, for the masculine just as much as for feminine population. What can be seen is that the reports do cover issues that have an empowering content – most dominant on a local level, also to be seen on a nationwide level, and most significant also by a surprisingly large number on a regional level.

7.4 Final Conclusion – New Media / ICTs to overcome the Content Divide?

Merging all this results in order to answer the main question of the paper, if ‘New Media’ / ICTs can overcome the content divide – the answer is in favour of the question. In contrary to the term ‘digital divide’, where literature seems to be positive about a decline of the gap, a formula of how to decline or even overcome ‘content divide’ could not be found in accurate literature. When looking at specific projects that try to fight the issue of the gap of content between the having and the not having, it seems that the gap can be minimised. This applies in particular to the mobile phone, as it is likely to have the most potential to contribute to a countries development within the range of all technological devices.

The potential of mobile phones to overcome the content divide lies in its multifaceted utilisation options: Money transfer, medical reminders, riot alerts, information on market prices, and of course communication via long distances. One of these facets, local journalism where content is created by the mobile phone and then made accessible via the Internet, also seems to be a promising option for several reasons:

The production costs are low, providing the content to a bigger audience is simple. The impact and positive effects that this new way of journalism delivers are yet underestimated. Summing all that up by one sentence, it is once more Kofi Annan who provides the appropriate quote: *“ICT’s are not the panacea of magic formula, but the can improve the lives of everyone on that planet”* (Annan, 2003). This paper has shown that the described project of the ‘Voices of Africa Media Foundation’ could be small one stone in the big mosaic towards that vision.

7.5 Outlook

So what is next? What will the gap look like in the coming five years? And what about in ten or 20 years? And how long to wait until the gap is completely overcome?

Three different but still interconnected aspects will be pointed out to give an indication of how to overcome the content divide shall be made: Penetration with mobile phones in sub-Saharan Africa, the connection to the world wide web, and as amendment, the current situation of the VOAMF (written as last paragraph before this paper is handed in).

One phone per person in sub-Saharan Africa?

Rather than providing text and numbers, the following graphic illustrates the number of mobile phone users in the focus region of this research paper. The graphic has been generated by Jaspur Grosskurth for the already mentioned publication on futures of technology in Africa by merging data from ‘*Africa Development indicators*’, the *World Bank* and *RNCOS*.³⁷

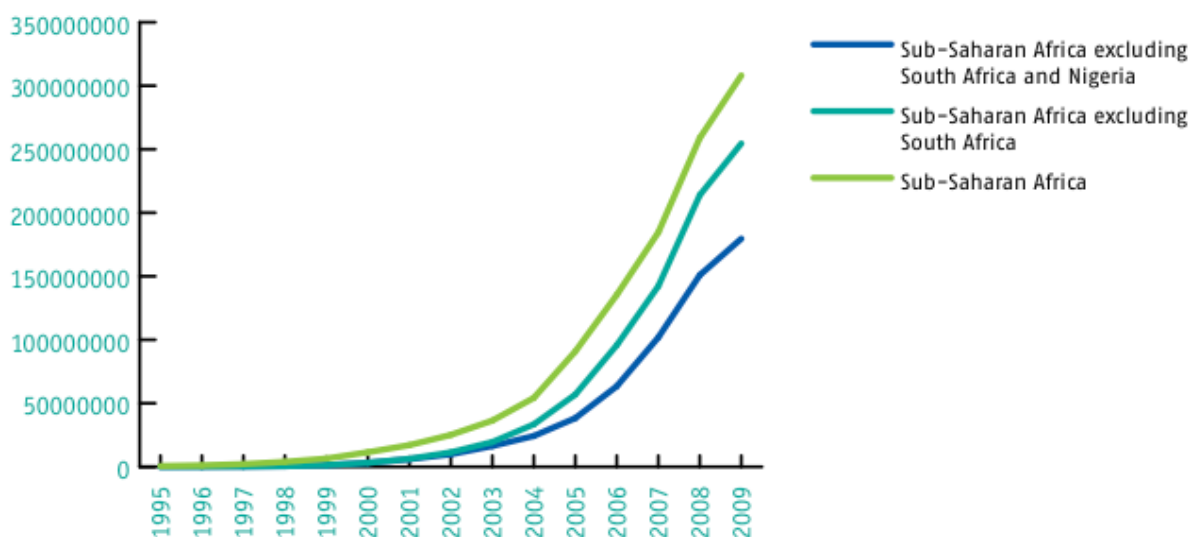


Fig. 7-1: Number of mobile phone users in sub-Saharan Africa (Grosskurt, 2010, p. 41).

Although the latest numbers are from the year 2009, one can see that the amount of mobile phones in sub-Saharan Africa is raising high, which no indication of a decline in the near

³⁷ ,RNCOS' is a worldwide acting industry research solutions company.

future. Since the paper has shown that mobile phones have the potential to overcome the content divide, this provides a positive outlook.

Connection to the world

It is a simple principal – the more of something is available, the cheaper it will get. And the cheaper something is, the more people can afford it. If one relates that to Internet access, it would mean that the more access and bandwidth is available, the more will regions that so far have been underprivileged be able to connect to the rest of the world.

In the advent of the 2010 soccer world cup in South Africa, the ‘*Seacom*’ undersea fibre optic cable was laid. On the 23rd of June 2009, the connection went live, and since then, East Africa is finally plugged into high speed Internet. Researchers from Stanford University predict that this will, beside the technical aspect of reducing losses and jitter, dramatically reduce the cost of bandwidth for the connected clients (see: stanford.edu, 2010; Accessed 02/09/2011).

Again, rather than providing text and numbers, the following graphics illustrate how Africa has been connected in recent years and will be connected in the near future. Originator of the graphics is Steve Song, founder of a social enterprise that builds low-cost technologies for underdeveloped areas and who has been engaged in ‘Information and Communication Technologies for Development’ (ICT4D) issues since 15 years. The last of the seven graphics contains the individual bandwidth of the undersea cables:

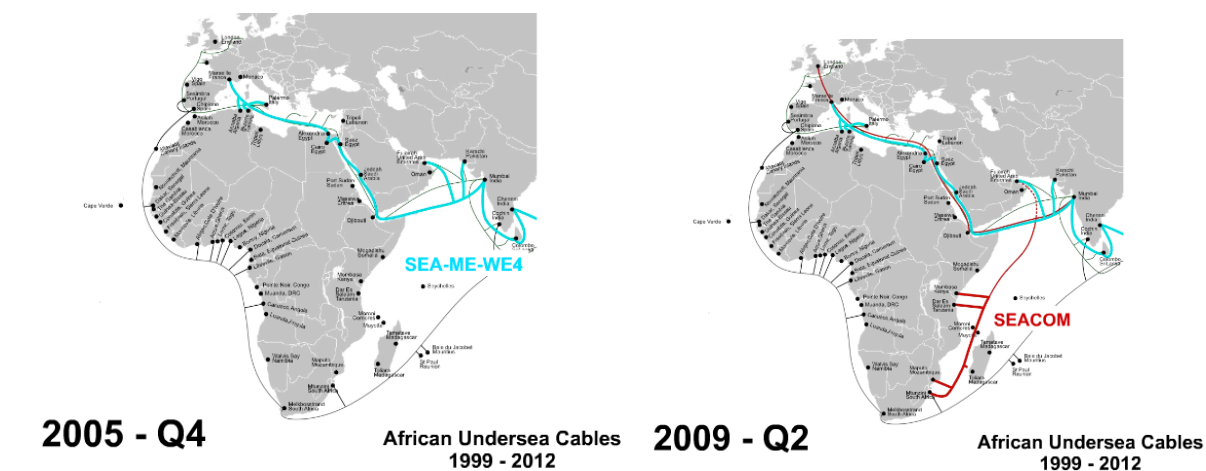


Fig. 7-2: African Undersea Cables in Q4 2005

Fig. 7-3: African Undersea Cables in Q2 2009

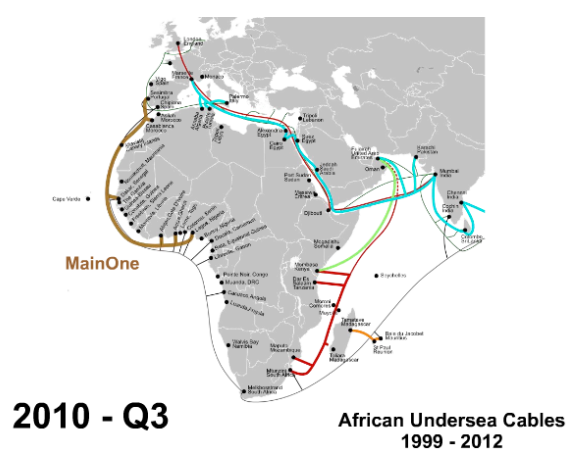


Fig. 7-4: African Undersea Cables in Q3 2010

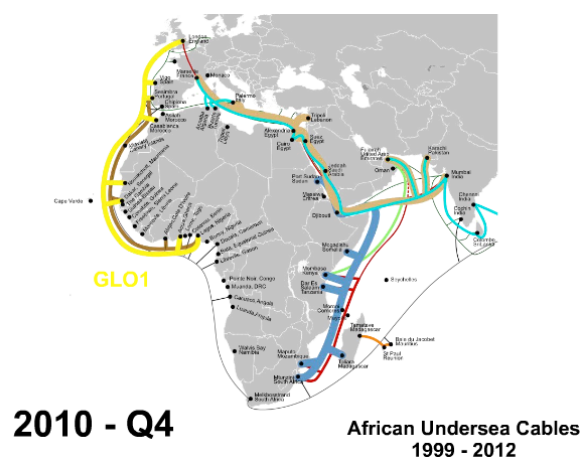


Fig. 7-5: African Undersea Cables in Q4 2010

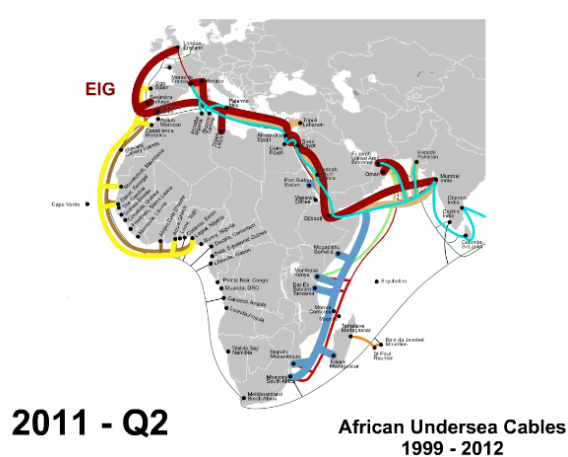


Fig. 7-6: African Undersea Cables in Q2 2011

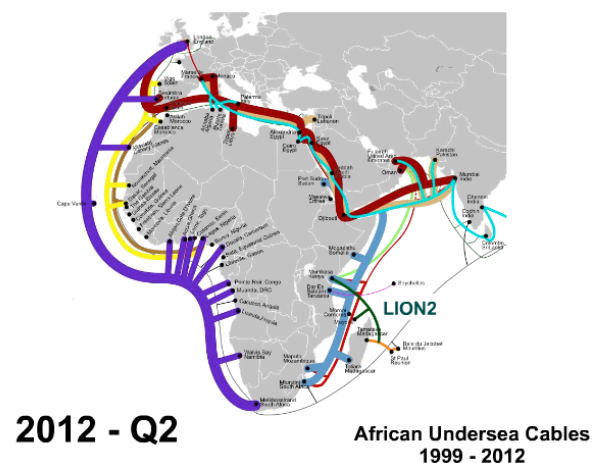


Fig. 7-7: African Undersea Cables in Q2 2012 (estimate)

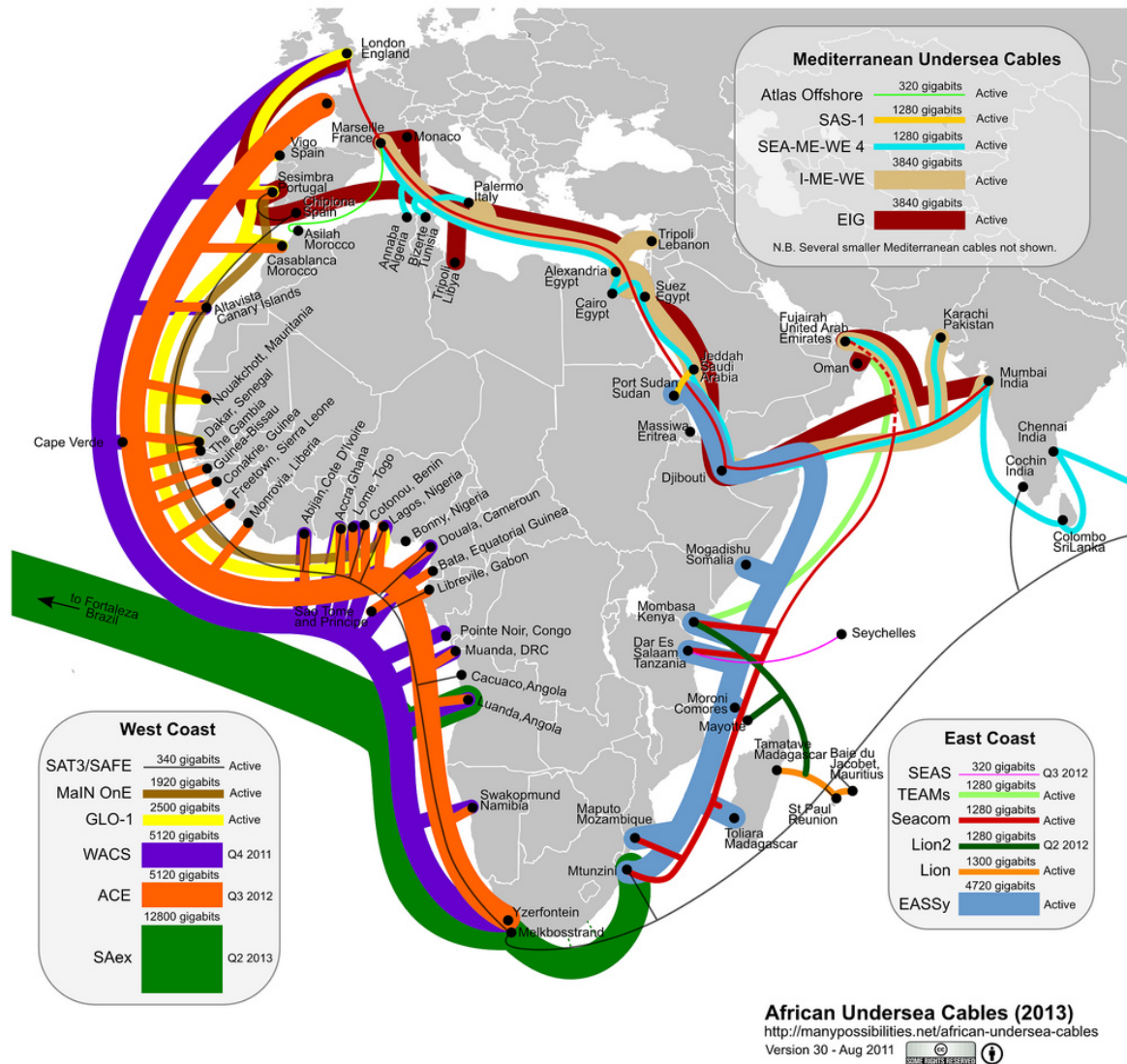


Fig. 7-8: African Undersea Cables in 2013 (estimate)

The illustrations speak for themselves and must not further be commented.

VOAMF

In June 2011, the project was expanded by another country – the Democratic Republic Congo. Ten new journalists, of whom nine are female, have embarked on a six-month mobile reporting training in partnership with the ‘*Institute of War and Peace Reporting*’ (IWPR). Their first reports are already available online. Also in June, three former trainees attended the forth edition of the ‘*Deutsche Welle Global Media Forum*’ in Bonn, Germany (see: voamf.org, 2011b; Accessed 02/09/2011).

As for the reporters that were trainees during the coding period in April 2011, 16 have now finished their education. Nick Okoth, Njeri Meressa, Bonny Kipchirichirick, Yusuf Maleli, Beryl Ogunya, Thomas Onyiego, Neville Albert Omondi and Wanjohi Peris Wairimu from Kenya; Salma Said, Muringi Jacob, Joseph Aron and Abisae Clemence Maeda from Tanzania; Francisca Nuvor, Edward Kwame Aklade, Kester Aburam Korankye and Psalm Marc Quao from Ghana have now all reached alumni status (see: VOAMF.org, 2011c; Accessed 02/09/2011).

If this paper has a minimal share on narrowing the divide, will be seen. As stated in the introduction, my personal approach and interest is to put a different, positive perspective on an unjust negative connotated continent. So the next logical step is to go out and spread this message according to the results generated by this research. And this is what I will do.

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9. Appendix

9.1 Summary (English)

It was in 1970 when Tichenor et al published their ‘knowledge gap theory’, stating that people with a higher socioeconomic status tend to acquire information faster than people with a lower status, leading to a gap in knowledge between having and not-having. Around the turn of the century, this theory was extended by the issue of the ‘digital divide’ – a gap between those who have access to ‘New Media’ or ‘Information and Communication Technologies’ (ICTs) and those who have not.

This theory then was further split up into more categories by the then UN general secretary Kofi Annan in 2003, stating that it is not only the access as furthermore the content that is of relevance, or to be more precise, mostly not of relevance for developing countries. Annan used the term ‘content divide’ to describe this specific matter.

While literature tells a lot about the digital divide and how it could be overcome - humanities seem to refer to the term ICT(4D) – ‘*Information and Communication Technologies (for Development)*’, whereas social sciences rather refer to the term ‘*New Media*’ - academic solutions on overcoming the content divide are hard to find in current literature.

The intention of this paper was to find out if New Media / ICTs can be used as tools to decrease the gap between the so-called ‘developed’ and ‘developing world’. This was done by analysing a concrete project, founded in the Netherlands and carried out in five sub-Saharan African countries. By the socio-scientific method of a quantitative content analyses, video-reports of two to four minutes in length that recorded events in Ghana, Kenya, South Africa, Tanzania and Uganda have been analysed by a therefore created codebook.

This was done according to the research questions on relevance and empowering functions for local communities where the reports were recorded – and eventually beyond. The first two hypotheses claimed that locally produced content is of high relevance to the local population,

but of low relevance to the population of the whole country or even the wider region. The third and fourth hypotheses claimed that locally produced content again have major empowering effects for the local community, but only minor empowering effects for the whole country or the wider region.

Those reports by African ‘to be reporters’ were recorded and edited on mobile phones as well as uploaded via the mobile phone network to an Internet website run by that mentioned organisation (Voices of Africa Media Foundation – VOAMF). By doing so, this specific way of mobile reporting bypasses the difficulties people in sub-Saharan Africa usually face: expensive video equipment, expensive editing software and hardware, lack of infrastructure (fixed Internet connections), urbanisation due to unemployment in rural areas, etc. etc.

Therefore all 228 reports that were published on the webpage of that organisation within one year have been analysed and coded by seven different categories to generate results in relation to relevance and empowerment. These results look as follows:

In terms of relevance, the content reports are not only of relevance for the local population, but also for the population of the whole country. Some relevance could be shown even for the wider region, but only to a small extend. In terms of empowerment, the results are twofold: A reasonable number of topics do contain empowering topics, and those topics can contribute to empowerment not only to the population of local areas or the nation, but even beyond countries borders. On the other hand, instructions of action on any regional level are rare – so the reports rather inform than ask for involvement.

In the light of the paper’s topic, the answer is, with limitations, in favour of the question: According to the one specific project that has been analysed, mobile phones as one specific devices of the tools of New Media / ICTs do have the potential to decrease the content divide in sub-Saharan Africa.

9.2 Zusammenfassung (Deutsch)

Im Jahr 1970 veröffentlichten Tichenor et al die ‚Wissensklufthypothese‘, die besagt, dass Personen mit höherem sozioökonomischen Status Informationen leichter aufnehmen als Personen mit niedrigerem Status, was zu einer Kluft zwischen Habenden und nicht-Habenden führt. Um die Jahrhundertwende wurde diese Theorie um den Begriff der ‚Digitalen Kluft‘, einer Lücke zwischen Personen mit Zugang zu neuen Medien / Informations- und Kommunikationstechnologien und ohne Zugang, erweitert.

Dieser Begriff wurde vom damaligen UN-Generalsekretär Kofi Annan im Jahr 2003 in Untergruppen aufgeteilt. Eine dieser Gruppen ist die ‚Inhaltskluft‘ (‚content divide‘), die besagt, dass nicht nur der Zugang, als vielmehr der Inhalt von Relevanz für sogenannte ‚Entwicklungsländer‘ ist – konkret diese Inhalte eben nicht von Relevanz für diese Länder sind.

In aktuellen wissenschaftlichen Literatur findet sich viel zur Überwindung der digitalen Kluft; theoretische Ansätze zur Überwindung der inhaltlichen Kluft sind selten. An diesem Punkt setzt dieses Elaborat an – Ziel ist es, herauszufinden, ob diese inhaltliche Kluft durch neue Medien / Informations- und Kommunikationstechnologien überwunden werden kann.

Anhand einer quantitativen Inhaltsanalyse wurde ein konkretes Projekt, initiiert in den Niederlanden und durchgeführt in fünf Ländern südlich der Sahara (Ghana, Kenia, Südafrika, Tansania und Uganda) untersucht. Video-Berichte in der Länge von zwei bis vier Minuten wurden anhand des dafür gestalteten Codebuches analysiert und kategorisiert. Folgende Forschungsfragen und Hypothesen sollten dadurch beantwortet und verifiziert werden:

Die ersten beiden Fragen beschäftigten sich mit der Relevanz der Videoberichte für die lokale Bevölkerung, der Bevölkerung des gesamten Landes und der gesamten Region – ausgehend von der Hypothese, dass die Berichte zwar für die Lokalbevölkerung, nicht aber darüber hinaus relevant sind. Die dritte Frage drehte sich um Empowerment-Funktionen der Berichte. Die Annahme war, dass die lokal produzierten Berichte zwar zum Empowerment der jeweiligen lokalen Gegend, nicht aber für das gesamte Land oder gar die gesamte Region beitragen können.

Die dafür analysierten Berichte wurden von angehenden Reportern mittels Mobiltelefonen aufgenommen und auf selbigem mit externem Keyboard und Maus geschnitten; und im Anschluss daran über das Mobilfunknetzwerk auf eine Internetseite hochgeladen. Diese Seite wird von der ‚Voices of Africa Media Foundation‘ (VOAMF) betrieben. Durch diese Art der Berichterstattung werden die Schwierigkeiten, die in Afrika südlich der Sahara häufig auftreten, umgangen: Teure Videoausrüstung, teurer Schnittcomputer mit dazugehöriger Software, fehlende Infrastruktur (fixe Internetverbindungen), Stadtflucht aufgrund fehlender Zukunftsperspektiven für junge Menschen, etc. etc.

Insgesamt wurden 228 Berichte der VOAMF Website, die alle innerhalb eines Jahres produziert wurden, analysiert, und nach sieben verschiedenen Aspekten kategorisiert. Das sind die dadurch erlangten Ergebnisse:

In Bezug auf Relevanz konnte gezeigt werden, dass die Inhalte der Berichte nicht nur für die lokale Bevölkerung, sondern auch für die Bevölkerung des ganzen Landes von Relevanz sind. Diese Relevanz konnte in geringem, aber wahrnehmbaren Ausmaß auch für die gesamte Region festgestellt werden. In Bezug auf Empowerment kamen zwei Resultate zutage. Zum ersten beinhalten eine erhebliche Anzahl der Berichte Inhalte, die nicht nur zum Empowerment der lokalen Gegend, sondern auch zum Empowerment des gesamten Landes beitragen kann. Mehr noch als in den ersten Forschungsfragen konnten wurden Empowerment-Inhalte, welche die ganze Region betreffen, gefunden. Zum zweiten hat sich gezeigt, dass die Berichte selten Handlungsanleitungen beinhalten, sprich die Berichte informieren, rufen aber nicht zu aktiver Teilnahme an Handlungen auf.

Für das konkret untersuchte Projekt zeigt sich in Bezugnahme auf den Titel des Forschungspapiers, dass Mobiltelefone als ein Teil von neuen Medien / Informations- und Kommunikationstechnologien das Potential haben, die inhaltliche Kluft zwischen den Ländern des Nordens und den Ländern des Südens zu verringern.

9.3 Curriculum Vitae Stefan F. Ossmann

PERSONAL DETAILS

Name	Stefan F. Ossmann
Date of Birth	12th February 1976
Place of birth	Ried im Innkreis / Upper Austria
Nationality	Austrian

CURRENT EDUCATION STATUS

International Development	Diploma thesis „ <i>Bridging the Content Divide – New Media / ICTs as possible solution for sub-Saharan Africa</i> “ – handed in August 2011
Communication Science	Diploma thesis (yet unannounced) to be handed in spring 2012

ACADEMIC EDUCATION

10/2004 - current	Baccalaureate and Master Studies „Communication Science“; Focus: public relations, television and communication science
03/2005 - current	Individual diploma studies „International Development“; 1st degree September 2007

PUBLICATIONS

Termnet	Ossmann, Stefan / Schmoelz, Alexander. (2011): "Cultural diversity in higher education: The "buddy-project" in the light of cultural homogenisation, heterogenisation and hybridisation. In: Drame, A. / Paepcke, H. (Hrsg.), Diversity and global understanding (S. 18-30). Wien: Termnet Publisher.
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BlickWi(e)nk(e)l (forthcoming)	Ossmann, Stefan / Herrmann, Cornelia (Ed.) (2011): „Blickwi(e)nk(e)l. Eine kulturelle Reise durch Wien. Vienna: University of Vienna (forthcoming autumn 2011).
ISCM Vienna 2011 (forthcoming)	International Summer School on Media and Communication. Conference contribution: „Bridging the content divide – New Media (ICT's) as possible solution fur sub-Saharan Africa?“ (Forthcoming February 2012)

ACADEMIC EXPERIENCE – STUDYING ABROAD

07/2009 – 11/2009 Joint Studies – Melbourne/Australia	One semester at the University of Melbourne (Australia); Focus: International relations / Communication research / Media and Globalisation
02/2007 – 06/2007 ERASMUS Cluj Napoca/Romania	One semester at the Babes-Bolyai University Cluj Napoca (Romania), Faculty of Journalism and Public Relations; Focus: Mass media / Local Journalism / Romanian Media and Politics

ACADEMIC EXPERIENCE - VIENNA

05/2011 Exchange University of Vienna / Masaryk University (Brno)	Exchange project University of Vienna (Department Communication Science) and Masaryk University, Brno, Czech Republic (Department of German, Dutch and Nordic studies); planning, coordination, evaluation, preparing publication
03/2010 – current “Buddy-Project” Communications Department Vienna	Coordination of the “Buddy-project” for integrating non- German-speakers into University requirements and routines; organisation of training, mentoring, field trips to media organisations, evaluation
03/210 – 07/2010 e- Learning „Step 3“	Coordination Step 3 e-learning team (app 15 persons); organisation and delivery of training workshops; coordination of grading, evaluation of lecturing tutor performance
02/2008 – 07/2009 Coordinator of Lecturing Tutors Communications Department Vienna	Recruitment of lecturing students (app. 80 persons per semester); organisation and delivery of training workshops; coordination of grading, evaluation of lecturing tutor performance
03/2007 – 05/2008 Project management assistant Tandem- Project Vienna/Pecs (Hungary)	Exchange Project „minorities in middle Europe“ implemented by universities in Vienna and Pecs/Hungary; project delivery; field research trips; fund-raising; public relations; monitoring; evaluation

10/2007 – 02/2008 Lecturing Tutor Communications Department Vienna	Presentation of two university courses on „Construction of reality in the Media” in theory and practice.
09/2006 Student Mentor trainer Vienna	Student mentor training „International Development“; presentation of three courses „University structures / construction of Society / guided tours through Vienna“
10/2005 – 02/2007 Liaison Officer Vienna	Liaison officer „International Development“; freshman advice, curriculum publication and distribution, administration, co-design of the Bachelor/Master curriculum

PREVIOUS EDUCATION

09/1995 – 06/1997 College Photography	„Höhere Graphische Bundeslehr- und Versuchsanstalt Wien XIV“ (Graphische), department photography, final diploma with honours 09/1997
09/1990 – 06/1994 A- Levels	Bundesoberstufenrealgymnasium Ried im Innkreis, Graphic department, final exams 09/1994
09/1986 – 06/1990 Secondary Modern school	Jakob Mayr Hauptschule, Waldzell (Upper Austria)
06/1982 – 09/1986 Elementary school	Volksschule Nussbaum, Waldzell (Upper Austria)

LANGUAGES

German	Mother tongue
English	Near fluently spoken, confident written
Dutch	Near fluently spoken, passable written
French	High school level spoken and written
Romanian	Basic skills spoken and written

9.4 List of Tables and Figures

9.4.1 Tables

Tab. 5-1: Habitants that have access to fixed telephone lines in developed countries, developing countries and the whole world

Tab. 5-2: Mobile cellular subscriptions in developed countries, developing countries and the whole world

Tab. 5-3: Estimated Internet users in developed countries, developing countries and the whole world

Tab. 5-4: Fixed broadband subscriptions in developed countries, developing countries and the whole world

Tab. 5-5: Mobile broadband subscriptions in developed countries, developing countries and the whole world

Tab. 5-6: Habitants that have access to fixed telephone lines by geographical region

Tab. 5-7: Mobile cellular subscriptions by geographical region

Tab. 5-8: Estimated Internet users by geographical region

Tab. 5-9: Fixed broadband subscriptions by geographical region

Tab. 5-10: Mobile broadband subscriptions by geographical region

9.4.2 Figures

Fig. 4-1: World map of human development as categorised by the UNDP

Fig. 5-1: Mobile cellular subscription per 100 inhabitants from the year 2000 to the year 2010 in developed countries, developing countries and the whole world

Fig. 5-2: Internet users per 100 habitants from the year 2000 to the year 2010 in developed countries, developing countries and the whole world

Fig. 5-3: Proportion of households with Internet access from the year 2000 to the year 2010 in developed countries, developing countries and the whole world

Fig. 6-A: Aspects of relevance according to Schatz / Schulz

Fig. 6.B: A causal framework for empowerment in state-society contexts

Fig. 6-1: Percentage of protagonists from that specific area / country / other countries

Fig. 6-2: Percentage of relevance of the issue for the local population and beyond

Fig. 6-3: Percentage of local / nationwide / region-wide targeted audience group

Fig. 6-4: Percentage of reports that addresses instructions of action for the local or the wider population

Fig. 6-5: Percentage of empowering topics or functions of the report in relation to the local area / the whole country / the whole region

Fig. 6-6: Percentage of reports that contain a gender-relevant topic

Fig. 6-7: Percentage of reports that are predominantly addressed at a female audience

Fig. 7-1: Number of mobile phone users in sub-Saharan Africa

Fig. 7-2: African Undersea Cables in Q4 2005

Fig. 7-3: African Undersea Cables in Q2 2009

Fig. 7-4: African Undersea Cables in Q3 2010

Fig. 7-5: African Undersea Cables in Q4 2010

Fig. 7-6: African Undersea Cables in Q2 2011

Fig. 7-7: African Undersea Cables in Q2 2012 (estimate)

Fig. 7-8: African Undersea Cables in 2013 (estimate)

9.5 Codebook

Codebook

For the diploma thesis

“Bridging the Content Divide – New Media / ICTs as possible Solution for sub-Saharan Africa?”

by Stefan F. Ossmann

1. General statement

The codebook at hand will be to generate empirical results for the diploma thesis at the department of International Development, Faculty of Arts at the University of Vienna.

2. Scheme for the analysis of video reports

2.1 Survey period:

Pre-Test: 10th March 2011 until 17th March 2011.

Test: 2nd April 2011 until 19th April 2011.

2.2 Recording unit: Video reports of the Internet homepage “Voices of Africa”.³⁸

Pre-Test: Only reports from Country “Tanzania”

³⁸ All reports can be accessed through the following URL: <http://voicesofafrica.africanews.com/> (accessed 27/12/2010).

Test: All countries as listed in chapter 3.2

2.3 Researched period:

All reports from all participating countries from 12th March 2011 until 10th March 2010.

2.4 Coding unit:

Level 1 – all reports of that specific homepage

Level 2 – all reports from a specific country

Level 3 – all reports from a specific country and a specific topic

Level 4 – content

2.5 General: Each report is consecutively numbered, starting with the newest report published at the time the research is carried out (12th March 2011).

3. Empirical Values

3.1 Matrix

	Country	Category	Date	Title	Name Author	Gender (m/f)	Languages
Report 1							
Report 2							
Report 3							

3.2 Definitions

“Report (number)” is how the reports will be numbered consecutively – starting from the latest report published on the webpage within the research period.

“Country” stands for the country the report was produced in. Since the project is active

in five Sub-Saharan African states, it must be one of the following (in alphabetical order): **Ghana / Kenya / South Africa / Tanzania / Uganda / (Zanzibar)**³⁹.

“Category” stands for one of the categories used by the webpage: **Health / Society / Economy / Governance / Environment / Youth**.

“Date” stands for the **date** the report was published on the webpage (which is in most cases the same date the individual reports were produced).

“Title” stands for the **title** of the report.

“Name Author” stands for the **name of the person** that produced and edited the report.

“Gender” stands for the sex of the person that produced and edited the report (**masculine/feminine**).

“Languages” stands for the languages that appear in the report and can have several values. First value is the language in which the report is produced (which is in almost all cases **English**). Second value is, if occurring, **further languages**. If the further language can be defined (for example French or Afrikaans), it will be **listed as such**; if the further language cannot be defined (local African languages), it will be listed as ‘**local**’.

4. Content-based values

4.1 Matrix

	Local participants	Local issues	Target group	Instructions for action	Empowering function	Gender aspect
Report						

³⁹ The islands of Zanzibar are officially part of Tanzania – but in the categorisation of reports by VOAMF listed separately. Since reports from Zanzibar are labelled on the Homepage as such, it will be listed in the codebook as separate country.

1						
Report 2						
Report 3						

4.2 Definitions

Notes:

Within the sub-divisions of the values, only one of each category will be selected.

Exception is the last sub-division (gender aspect), which can contain both sub-divisions. The sex of the producer is not a value within the sub-division since it is part of the empirical values (see Chapter 3.1)

The term “area” describes the local area where the report was recorded.⁴⁰

The term “region” describes the geographical region the country is located:

Ghana: West Africa

Kenya: East Africa

South Africa: Southern Africa

Tanzania (including Zanzibar): East Africa

Uganda: East Africa

4.2.1 Local participants

Category	Definitions / Notes	Code
Local	One or more protagonists come from the local area of that country	Par1

⁴⁰ For example the following report refers to the „Mara region“ in the article, although in the matrix it will be defined as the „Mara area“. This is to avoid confusion with the term „region“ in a bigger, more-nation-summarising context (i.e. North Africa / West Africa / East Africa / Central Africa / Southern Africa)

Other	One or more protagonists come from a different area of that country	Par2
Foreign	One ore more protagonists come from different countries	Par3
MixedLocal	One or more protagonists come from the local area of the country as well as from different areas of that country	Par4
MixedForeign	One or more protagonists come from the local area of the country as well as from different countries	Par5
None	The report does not have protagonists in terms of physical persons	Par9

Notes: If the topic does not have a physical protagonist but the topic is directly linked to one of the persons interviewed, then one of the options from Par1 to Par5 shall be chosen. If the topic is not directly linked to one of the persons interviewed, then Par9 shall be chosen.

4.2.2 Local issues

Category	Definitions / Notes	Code
Local Relevance	The content of the report is of specific relevance to that area only	Iss1
Nationwide Low Relevance	The content of the report is predominantly relevant for that area but also in minor terms for the whole country	Iss2
Nationwide High Relevance	The content of the report is of the same relevance for the area as it is for the whole country	Iss3
Region Relevance	The content of the report is not only relevant for the country but also for the whole region	Iss4
Relevance None	The content of the report is of no specific relevance to that area	Iss9

Notes: The classification of relevance follows the guideline as described in chapter 6.3.2

4.2.3 Target group

Category	Definitions / Notes	Code
Local Target	The target group (audience) to which the report is addressed is only the local population of that area	Tar1
Nationwide Low Target	The target group (audience) to which the report is addressed is predominantly the local population of that area but to a minor extend also the population of whole country	Tar2
Nationwide High Target	The target group (audience) to which the report is addressed is the whole country	Tar3
Region Target	The target group (audience) to which the report is addressed is the whole region	Tar4

Notes: The classification of addressing the different geographical population groups follows the guideline as described in chapter 6.4

4.2.4 Instructions for action

Category	Definitions / Notes	Code
Local Action	The report addresses instructions for action only to the local population (in relation to the specific target group of the report)	Act1
Nationwide Low Action	The report addresses instructions for action predominantly to the local population but in minor terms also to the whole population of the country (in relation to the specific target group of the report)	Act2
Nationwide High Action	The report addresses instructions for action predominantly to the population of the whole country (in relation to the specific target group of the report)	Act3
Region Action	The report addresses instructions for action predominantly to the population of the whole region (in relation to the specific target group of the report)	Act4
Action None	The report does not propose instructions for action	Act9

Notes: The classification of addressing the different geographical population groups follows the guideline as described in chapter 6.4. Instructions for action exist if the report has a ‘go out and do something’ message for the audience.

4.2.5 Empowering function

Category	Definitions / Notes	Code
Local Empowerment	The report contains topics that contribute to the empowerment of the local area where the report is produced	Emp1
Nationwide Low Impact Empowerment	The report contains topics that contribute predominantly to the empowerment of the local area where the report is produced but also in minor terms to the whole country	Emp2
Nationwide High Impact Empowerment	The report contains topics that contribute to the empowerment of the local area where the report is produced to the same extend as to the whole country	Emp3
Region Empowerment	The report contains topics that contribute to the empowerment not only of the local area and the country where the report is produced but also to the whole region	Emp4
Empowerment None	The report has no empowering topics	Emp9

Notes: The classification of empowerment for the different areas follows the guideline as described in chapter 6.3.3

4.2.6 Gender aspect

Category	Definitions / Notes	Code
Gender Topic Yes	The report contains gender-relevant topics	Gen1
Gender topic No	The report does not contain a gender-relevant topic	Gen2
Gender audience Yes	The target group (audience) that the report addresses is predominantly feminine	Gen3
Gender audience No	The target group (audience) that the report addresses is not predominantly feminine	Gen4

Notes: The classification of gender-relevance follows the guidelines as described in chapter 6.3.4

9.6 Empirical Data

The original matrix is a .xlsx file that due to its size does not fit into the format of this paper – therefore the matrix have been split up in several pages and copied into the appendix. If the whole file is requested, please contact the author via mail: Stefan.ossmann@univie.ac.at .

Reports that have not been classified by any of the ‘category’ categories have been listed with a ‘9’. Reports that were damaged are listed but crossed out.

Report Number	Date	Country	Category	Title
1	12.03.2011	Kenya	Economy	Mobile banking gaining more ground
2	07.03.2011	Ghana	Health	Doctor calls for ban on e-dumping
3	16.02.2011	Uganda	Society	Kampala: Motorist dies as car hits him
4	15.02.2011	Uganda	Society	Kampala: Man slips and dies
		South		Durban: School vacation means
4	10.02.2011	Africa		9 hunger
		South		Jburg: Dancing attracting more street
5	09.02.2011	Africa		9 kids
				Kampala: suspected thief survives
6	08.02.2011	Uganda	Society	lynch
				Kampala: Man punches wife live on
7	08.02.2011	Uganda	Society	mobile
		South		Johannesburg: Kids can now cross
8	08.02.2011	Africa		9 safely
				Ghana: dealers displeased gvt e-waste
9	07.02.2011	Ghana		9 policy
				Kampala: locals unhappy about slow
10	07.02.2011	Uganda	Society	tarmacking
		South		Johannesburg: Oldie helps kids cross
11	07.02.2011	Africa	Society	road
12	06.02.2011	Uganda	Environment	Toxic drums for sale in Mbiro
				Ghana: Caution against 2nd-hand
13	06.02.2011	Ghana		9 gadgets
14	29.01.2011	Uganda		9 Kampala: 3 kids die as houses burn
15	28.01.2011	Ghana	Health	E-waste becoming business
16	28.01.2011	Uganda	Society	Kampala: Toilet causes havoc in slum
17	28.01.2011	Uganda		9 Fathil Mohamed Okello profile
18	20.01.2011	Uganda	Society	Kampala: Chicken intestines delicious
19	03.01.2011	Zanzibar		9 Neighbours as babysitters
				Unmasking child abuse with mobile
20	05.12.2010		9 Society	phones
		South		
21	02.12.2010	Africa		9 Research points out child rights issues
22	30.11.2010	Kenya	Governance	Local news by locals: the Kenyan case
23	24.11.2010	Kenya	Governance	Isiolo: Armed attacks claim more lives

24	22.11.2010	Tanzania		9	Street kids willing to go to school
25	15.11.2011	Tanzania		9	Anti-mutilation campaign underway
26	08.11.2010	Tanzania	Youth		How can kids learn without playing?
27	01.11.2010	Africa	Youth		J'burg: Safety stressed as swimming season comes
28	31.10.2010	Tanzania	Environment		Company fails to seduce teachers
29	28.10.2010	Zanzibar		9	Home energy big cause of deforestation
30	25.10.2010	Tanzania	Economy		Despair as rains sweep plantations
31	27.10.2010	Tanzania	Youth		Arusha: Former street kids turn lodge staff
32	23.10.2010	Tanzania	Governance		Tanzanians stress corruption ahead of polls
33	19.10.2010	Zanzibar	Society		Hats still deeply rooted in Zanzibar
34	18.10.2010	Tanzania	Health		Tarime residents resort to drainage water
35	18.10.2010	Zanzibar	Economy		Zanzibar: Women lack capital for fish trade
36	15.10.2010	Tanzania	Health		Anti-mutilation campaign underway
37	13.10.2010	Kenya	Society		Ugunja: Motor cycle accidents increase
38	13.10.2010	Tanzania	Youth		Company woes villagers through sport
39	12.03.2011	Zanzibar	Society		Women want more involvement
40	12.10.2010	Kenya	Society		Ugunja remembers fire tragedy
41	04.10.2010	Zanzibar	Economy		Hygiene problematic in fish trade
42	30.09.2010	Zanzibar	Economy		Fake drugs in massive circulation in Zanzibar
43	30.09.2010	Tanzania	Environment		Poultry project relieves pressure on nature
44	29.09.2010		9 Society		Africa: Phone and everyday life
45	28.09.2010	Zanzibar	Society		Immature fruit inundate market
46	27.09.2010	Tanzania	Society		Rains destroy banana farms
47	25.09.2010	Tanzania	Youth		School awareness gains momentum
48	25.10.2010	Zanzibar		9	Seaweed trade flourishes
49	23.09.2010	Africa	Youth		Johannesburg: Kids go through art therapy
50	22.09.2010	Zanzibar	Society		Eid means celebration
51	22.09.2010	Tanzania	Governance		UN gives journalists a hint on polls
52	21.09.2010	Zanzibar	Economy		Zanzibar affected by increasing prices
53	21.09.2010	Kenya	Society		Legio Mariae begin pilgrimage
54	21.09.2010	Kenya	Economy		Kisumu: Bridge under threat due to quarry
55	17.09.2010	Africa	Youth		Limpopo: Children shocked after family tragedy
56	16.09.2010	Zanzibar	Governance		Zanzibar disabled encouraged to vote
57	16.09.2010	Tanzania	Environment		Elderly turns seedling supplier
58	15.09.2010	Kenya	Health		Mombasa: Masses want info via SMS
59	15.09.2010	Kenya	Governance		Kenyans optimistic for new Constitution
60	13.09.2010	Tanzania	Governance		Vote for persons not for parties
61	13.09.2010	Kenya	Society		Risks as a result of joblessness
62	10.09.2010	Zanzibar	Governance		Poll official optimistic
63	10.09.2010	Tanzania	Youth		Teacher training now ICT driven
64	07.09.2010	Kenya	Economy		News to the Net via the phone
65	07.09.2010	Kenya	Economy		Kenyans divided over SIM-card registration
66	07.09.2010	Tanzania	Youth		Crowded schools in double session

67	06.09.2010	Tanzania	Environment	Tanzanians want nature friendly bags
68	06.09.2010	Zanzibar	Youth	Early pregnancy cases increase
69	05.09.2010	Kenya	Economy	Mombasa: Phone taking over radio
70	05.09.2010	South Africa	Society	Soweto: Children abandoned following strike
71	02.09.2010	Tanzania	Youth	Teachers blamed for poor performance
72	02.09.2010	Kenya	Economy	Kenyans smile as phone calls get cheaper
73	01.09.2010	Kenya	Economy	Isiolo: Women launch mutual help fund
74	01.09.2010	Tanzania	Society	Farmers celebrate their day
75	30.08.2010	Kenya	Economy	Public transport costs go up
76	30.08.2010	Tanzania	Youth	Kids in hard labour during school time
77	29.08.2010	Tanzania	Society	Natural well rescues thousands
78	29.08.2010	Tanzania	Economy	Coconut fibre trade flourishes
79	29.08.2010	Zanzibar	Society	Oldest church in East Africa renovated
80	27.08.2010	Zanzibar	Society	Chief dies in Ugunja fire tragedy
81	24.08.2010	Tanzania	Health	Diarrhea epidemics hits northern Tanzania
82	23.08.2010	Zanzibar	Society	Zanzibar hit by erosions
83	20.08.2010	Tanzania	Youth	I need just a wheel chair- school boy
84	20.08.2010	Kenya	Society	Ugunja: Funeral a moment to share
85	18.08.2010	Kenya	Society	Kenyans divided over local liquors
86	18.08.2010	Kenya	Governance	Kibera artist in peace campaign
87	18.08.2010	Kenya	9	Pastoralists turn to fish farming
88	17.08.2010	Kenya	Health	Ugunja cleans up to prevent diseases
89	17.08.2010	Tanzania	Environment	Solar cooking reaches northern Tanzania
90	17.08.2010	South Africa	Society	South Africa joins mobile reporting project
91	09.08.2010	Kenya	Economy	Ugunja: Local sweets sweeter and cheaper
92	06.08.2010	Ghana	Economy	Phone charging hits Accra market
93	06.08.2010	Kenya	Governance	'I am proud to be part of change'
94	06.08.2010	Kenya	Economy	Mombasa: Villagers online on phone
95	06.08.2010	Kenya	Governance	Masses turn out for referendum
96	04.08.2010	Kenya	Society	Creating Law awareness in Nairobi slum
97	04.08.2010	Ghana	Society	Accra: Phone turns Personal Digital Assistant
98	04.08.2010	Tanzania	Gouvernance	Women vie for more seats in Oct. polls
99	02.08.2010	Kenya	Society	NGO gets women in mainstream media
100	02.08.2010	Zanzibar	Society	Kids break rocks for money
101	30.07.2010	Tanzania	9	Poultry project relieves pressure on nature
102	29.07.2009	Ghana	Economy	Phone dealers make it
103	29.07.2009	Kenya	Society	No need for camera as there is phone
104	27.07.2010	Zanzibar	Economy	Livestock keepers dissatisfied
105	27.07.2010	Kenya	Economy	Police arrest Changaa brewers
106	25.07.2010	Tanzania	Health	HIV services extended to villages
107	19.07.2010	Tanzania	Economy	Coffee is money and sweet
108	19.07.2010	Kenya	Youth	Millennium project targets school
109	15.07.2010	Tanzania	Youth	Orphans receive goats in north
110	15.07.2010	Kenya	Society	Ugunja: Millennium village still in poverty
111	13.07.2010	Kenya	Youth	Less energy but more brain work, says

				artist
112	13.07.2010	Kenya	Economy	Mombasa: Phone charging becomes profitable
113	12.07.2010	Tanzania	Economy	Plan for resistant coffee underway
114	12.07.2010	Tanzania	Governance	Kikwete inaugurates water in Serengeti
115	12.07.2010	Ghana	Health	Each tree can heal, says traditional healer
116	08.07.2010	Kenya	Youth	Kenyans condemn fan killing after WC dispute
117	08.07.2010	Kenya	Youth	Eastern Kenya: villagers assess World Cup
118	08.07.2010	Ghana	Youth	Tamale Business school makes a difference
119	06.07.2010	Kenya	Economy	Mombasa: Jersey sellers on WC business
120	06.07.2010	Kenya	Society	Kibwezi: Radio uses phone to boost security
121	05.07.2010	Ghana	Economy	farmers get animals instead of cash
122	05.07.2010	Kenya	Society	festival brings confessions together
123	05.07.2010	Kenya	Youth	Help us secure our rights, say Kenyan kids
124	05.07.2010	Kenya	Health	Anti malaria spraying starts in Migori
125	05.07.2010	Kenya	Economy	Poor sales despite school festival
126	30.06.2010	Kenya	Economy	Informal trade flourishes in Majengo
127	30.06.2010	Ghana	Youth	Tamale kids between labour and football
128	30.06.2010	Tanzania	Economy	Turning soil into food profitable
129	29.06.2010	Tanzania	Economy	SIM card registration ends
130	28.06.2010	Ghana	Youth	The Cup must come home- say Ghanaians
131	25.06.2010	Ghana		9 Vittin dam to the rescue
132	25.06.2010	Kenya		9 Mombasa region expects better
133	25.06.2010	Kenya	Youth	9 harvests
134	18.06.2010	Tanzania		9 Children reminds of their rights
135	18.06.2010	Kenya		9 Kilimanjaro and its worrying ice cracks
136	18.06.2010	Tanzania	Economy	9 Towards renewable energy in Kenya
137	16.06.2010	Tanzania	Health	Bicycles for banana transport
138	14.06.2010	Kenya	Economy	Lack of latrines hampers education
139	13.06.2010	Kenya	Society	Mobile banking simplifies trade in rural Kenya
140	13.06.2010	Ghana	Youth	Ugunja: Mentally challenged kids get skills
141	08.06.2010	Kenya	Youth	Famous Ali Jarra train goalkeepers
142	07.06.2010	Tanzania		Mombasa: Cinema owners test TV ahead of WC
143	07.06.2010	Kenya		Mara region: 400 trees on Environment Day
144	07.06.2010	Tanzania	Governance	9 Ugunja: Floods leave farmers hopeless
145	05.06.2010	Kenya	Society	North Tanzania: Residents upset over garbage
146	04.06.2010	Kenya	Health	Nairobi: Sandals maker invites women
147	03.06.2010	Kenya	Economy	Isiolo: HIV education intensifies
148	03.06.2010	Kenya	Youth	Kenyans will watch World Cup on mobile phone
149	02.06.2010	Ghana	Economy	The Maasai get brand new high school
				Banking, browsing...the phone does all

150	01.06.2010	Kenya	Youth	Villagers start private school
151	01.06.2010	Kenya	Society	Mombasa: From cool thatch to iron sheets
152	01.06.2010	Ghana	Economy	Accra: WC 2010 kit vendors overwhelmed
153	31.05.2010	Kenya	Society	Bananas processed into flour
154	29.05.2010	Kenya	Economy	Village life turns around a stream
155	29.05.2010	Kenya	Youth	Isiolo: Street children offered a chance
156	29.05.2010	Kenya	Society	How grandma cares for nine kids
157	27.05.2010	Tanzania	Youth	Married children given support
158	27.05.2010	Kenya	Health	Nairobi: Quantities of forbidden brew seized
159	26.05.2010	Zanzibar	Youth	Kids want desks in classrooms
160	25.05.2010	Tanzania	Society	New bridge triggers celebration
161	25.05.2010	Kenya	Economy	Nairobi: Slam youths active in plant export
162	25.05.2010	Kenya	Governance	Kibera residents feel the new technology
163	18.05.2010	Zanzibar	Society	Crippled woman becomes creative
164	18.05.2010	Kenya	Health	Nairobi: Majengo cleans up against flu
165	18.05.2010	Kenya	Health	Isiolo takes full advantage of local herbs
166	17.05.2010	Ghana		9 Media fail to inform on climate
167	17.05.2010	Tanzania	Society	Mother burns 7-year-boy over Ugali
168	16.05.2010	Kenya		9 Kibera embracing cheap and clean energy
169	16.05.2010	Kenya		9 Woman champions tree planting
170	16.05.2010	Cameroon	Youth	Referee turns Sunday footballer
171	11.05.2010	Kenya		9 Energy saving stoves reach rural Kenyans
172	11.05.2010	Kenya	Society	Mombasa: Locals enjoy decriminalized wine
173	11.05.2009	Tanzania	Governance	Irregular farming season raises worries
174	09.05.2010	Kenya	Economy	Kibwezi: Milk supply becomes problematic
175	09.05.2010	Kenya	Gouvernance	Rural Kenya voters unwilling to register
176	09.05.2010	Kenya	Health	Nairobi: Life goes on despite HIV in Kibera
177	05.05.2010	Kenya	Governance	Youths reflect on current political issues
178	05.05.2010	Kenya	Society	Ghetto views on ghetto life
179	03.05.2010	Tanzania	Youth	I need just glasses, says Tanzanian albino
180	03.05.2010	Kenya		9 Floods start claiming lives in Migori
181	03.05.2010	Ghana		9 Accra: Worries as sea level keeps rising
182	02.05.2010	Kenya	Society	Mombasa: Ocean puzzles residents
183	02.05.2010	Zanzibar	Youth	Zanzibari turn to fitness for better health
184	29.04.2010	Kenya		9 Mombasa: Search for sand destroys nature
185	29.04.2010	Kenya	Society	Mombasa: Men join women in weaving
186	28.04.2010	Tanzania	Economy	Glas bottles recycled into beads
187	28.04.2010	Kenya	Health	Malaria still rampant in Ugunja
188	27.04.2010	Tanzania	Economy	Village trade rests on tourism
189	26.04.2010	Kenya	Economy	Ugunja: Local sausage is good

				business
190	23.04.2010	Kenya	Governance	Electronic cards to prevent rigging
191	21.04.2010	Kenya		9 Migori: poverty persists despite
192	21.04.2010	Tanzania	Health	goldmine
				More people register for HIV drugs
193	21.04.2010	Zanzibar	Governance	Zanzibar women brace themselves for
				polls
194	21.04.2010	Ghana	Governance	Nameless streets challenge Accra
195	20.04.2010	Tanzania	Youth	residents
196	20.04.2010	Kenya	Governance	9 year orphan struggles to feed family
				Kenya moves towards birth restriction
197	19.04.2010	Tanzania	Society	Arusha: Rotary Club wants all drops
				collected
198	17.04.2010	Tanzania		9 Savage fishing depletes fish in Lake
				Victoria
199	17.04.2010	Kenya	Youth	Nairobi: Slum boxing reaches high
200	17.04.2010	Kenya	Governance	standards
201	17.04.2010	Ghana	Society	Voter registration starts in reticence
				The Liberations Square
202	17.04.2010	Ghana	Economy	What stakeholders should know on
203	14.04.2010	Kenya	Youth	Ghana oil
204	14.04.2010	Zanzibar	Health	Ugunja: poor but not hopeless kids
205	13.04.2010	Kenya	Society	Malaria prevalence now at 1 percent
206	13.04.2010	Ghana	Youth	Kibera develops own renewable energy
207	13.04.2010	Kenya	Economy	Kids get new uniform from gvt
208	13.04.2010	Kenya	Society	Water melons unpopular in Kibwezi
				Pastoralists engage in agriculture
209	13.04.2010	Kenya		9 Isiolo: Diesel as insecticide in
210	13.04.2010	Tanzania		9 restaurant
211	08.04.2010	Kenya	Society	9 Pollution threats in mining zone
212	08.04.2010	Ghana	Youth	Hardworking farmer gets fame
				Village takes education in own hands
213	08.04.2010	Kenya	Health	Nairobi: HIV-affected exchange on
214	08.04.2010	Ghana	Youth	their issues
				World Cup fever rising steadily
215	07.04.2010	Kenya	Youth	Kibera gets TV ready ahead of World
216	07.04.2010	Tanzania	Youth	Cup
				President' s lunch for orphans
217	02.04.2010	Kenya	Health	Free diabetes check up and drugs in
				Kibera
218	02.04.2010	Ghana		9 Weeds on Volta River: nature or
				spirits?
219	31.03.2010	Ghana	Youth	I will be an important person- Ghana
				blind kid
220	31.03.2010	Kenya	Youth	Reading fostered among kids in rural
				Kenya
221	29.03.2010	Kenya	Health	Migori: Hiv-infected kids get food
222	29.03.2010	Ghana	Economy	assistance
				Book launched on Ghana's oil and gas
223	29.03.2010	Kenya	Youth	Disabled ready for US Volley
224	29.03.2010	Kenya		9 championships
				Kibwezi: From no rain to too much rain
225	28.03.2010	Ghana	Youth	Roadside selling keeps kids away from
226	28.03.2010	Kenya	Society	school
227	28.03.2010	Kenya		9 Disabled feel they are forgotten
228	28.03.2010	Ghana	Society	Risky jobs on River Nzoia banks
				Rainy season hinders transport

229	23.03.2010	Kenya	Governance	Kenyans diverge on abortion Nairobi: Multiethnic project celebrates success
230	23.03.2010	Kenya	Society	
231	23.03.2010	Ghana	Economy	Potters faced with firewood challenges
232	22.03.2010	Kenya	Economy	Isiolo: Community bank launched Migori: Residents fear waterborne disease
233	19.03.2010	Kenya	Health	Nairobi: Dumping site become fertile farm
234	10.03.2010	Kenya		9

Report Number	Name Author	Sex Author	Languages
1	Peris Wairimu	f	eng
2	Francisca Nuvor	f	eng
3	Fathil Mohamed Okello	m	eng
4	Fathil Mohamed Okello	m	eng/local
4	Skhulile Ngcobo	f	eng/local
5	Anthony Mmatli	m	eng
6	Fathil Mohamed Okello	m	eng
7	Fathil Mohamed Okello	m	eng/local
8	Anthony Mmatli	m	eng/local
9	Edward Kwameh Aklade	m	eng/local
10	Ismael Asimwe Mustapha	m	eng/local
11	Anthony Mmatli	m	eng/local
12	Lydia Kabanyana	f	eng/local
13	Edward Kwameh Aklade	m	eng
14	Fathil Mohamed Okello	m	eng
15	Francisca Nuvor	f	eng
16	Fathil Mohamed Okello	m	eng/local
17	Fathil Mohamed Okello	m	eng
18	Lydia Kabanyana	f	eng
19	Salma Said	f	eng
20	Olivier Nyirubugara	m	eng
21	Colin October	m	eng
22	Olivier Nyirubugara	m	eng
23	Adhe Dida	f	eng
24	Mugini Jacob	m	eng/local
25	Mugini Jacob	m	eng/local
26	Mugini Jacob	m	eng/local
27	Colin October	m	eng/local
28	Mugini Jacob	m	eng
29	Salma Said	f	eng
30	Mugini Jacob	m	eng/local
31	Abisae Maeda	m	eng
32	Mugini Jacob	m	eng
33	Salma Said	f	eng
34	Mugini Jacob	m	eng/local
35	Salma Said	f	eng/local
36	Mugini Jacob	m	eng/local
37	Njeri Meresa	f	eng/local
38	Mugini Jacob	m	eng/local
39	Salma Said	f	eng/local
40	Njeri Meresa	f	eng

41	Salma Said	f	eng/local
42	Salma Said	f	eng/local
43	Mugini Jacob	m	eng/local
44	Olivier Nyirubugara	m	eng/fra
45	Salma Said	f	eng/local
46	Mugini Jacob	m	eng/local
47	Mugini Jacob	m	eng
48	Salma Said	f	eng/local
49	Vuyolwethu Seripe	f	eng
50	Salma Said	f	eng
51	Mugini Jacob	m	eng
52	Salma Said	f	eng/local
53	Nick Fred Okoth	m	eng
54	Njeri Meresa	f	eng
55	Paul Mukhufi	m	eng
56	Salma Said	f	eng/local
57	Mugini Jacob	m	eng/local
58	Yusuf Maleli	m	eng
59	Nick Fred Okoth	m	eng
60	Mugini Jacob	m	eng
61	Njeri Meresa	f	eng/local
62	Salma Said	f	eng
63	Mugini Jacob	m	eng
64	Yusuf Maleli	m	eng
65	Nick Fred Okoth	m	eng
66	Mugini Jacob	m	eng/local
67	Mugini Jacob	m	eng
68	Salma Said	f	eng/local
69	Yusuf Maleli	m	eng/local
70	Colin October	m	eng/local
71	Mugini Jacob	m	eng/local
72	Neville Omondi	m	eng
73	Adhe Dida	f	eng
74	Mugini Jacob	m	eng/local
75	Njeri Meresa	f	eng
76	Mugini Jacob	m	eng/local
77	Mugini Jacob	m	eng/local
78	Salma Said	f	eng/local
79	Salma Said	f	eng
80	Njeri Meresa	f	eng/local
81	Mugini Jacob	m	eng/local
82	Salma Said	f	eng/local
83	Mugini Jacob	m	eng/local
84	Njeri Meresa	f	eng/local
85	Nick Fred Okoth	m	eng
86	Bonny Kipchirchir	m	eng/local
87	Adhe Dida	f	eng/local
88	Njeri Meresa	f	eng
89	Mugini Jacob	m	eng/local
90	Olivier Nyirubugara	m	eng
91	Njeri Meresa	f	eng
92	Francisca Nuvor	f	eng
93	Neville Omondi	m	eng
94	Yusuf Maleli	m	eng/local

95	Thomas Onyiego	m	eng
96	Bonny Kipchirchir	m	eng
97	Francisca Nuvor	f	eng
98	Mugini Jacob	m	eng/local
99	Beryl Omunya	f	eng
100	Salma Said	f	eng/local
101	Mugini Jacob	m	eng/local
102	Francisca Nuvor	f	eng
103	Yusuf Maleli	m	eng/local
104	Salma Said	f	eng/local
105	Njeri Meresa	f	eng
106	Mugini Jacob	m	eng/local
107	Mugini Jacob	m	eng
108	Njeri Meresa	f	eng
109	Mugini Jacob	m	eng/local
110	Njeri Meresa	f	eng/local
111	Njeri Meresa	f	eng
112	Yusuf Maleli	m	eng
113	Mugini Jacob	m	eng
114	Mugini Jacob	m	eng/local
115	Psalm Mark Quao	m	eng
116	Nick Fred Okoth	m	eng
117	Yusuf Maleli	m	eng
118	Psalm Mark Quao	m	eng
119	Yusuf Maleli	m	eng/local
120	Yusuf Maleli	m	eng
121	Psalm Mark Quao	m	eng
122	Njeri Meresa	m	eng/local
123	Thomas Onyiego	m	eng/local
124	Nick Fred Okoth	m	eng/local
125	Njeri Meresa	f	eng
126	Thomas Onyiego	m	eng
127	Psalm Mark Quao	m	eng
128	Mugini Jacob	m	eng/local
129	Mugini Jacob	m	eng/local
130	Francisca Nuvor	f	eng
131	Psalm Mark Quao	m	eng
132	Yusuf Maleli	m	eng/local
133	Njeri Meresa	f	eng
134	Abisae Maeda	m	eng/local
135	Beryl Omunya	f	eng
136	Mugini Jacob	m	eng/local
137	Mugini Jacob	m	eng/local
138	Yusuf Maleli	m	eng
139	Njeri Meresa	f	eng
140	Francisca Nuvor	f	eng
141	Yusuf Maleli	m	eng
142	Mugini Jacob	m	
143	Njeri Meresa		
144	Mugini Jacob	m	eng/local
145	Thomas Onyiego		
146	Adhe Dida		
147	Thomas Onyiego		
148	Sylvia Kore		

149	Francisca Nuvor	f	eng
150	Yusuf Maleli	m	eng/local
151	Yusuf Maleli	m	eng/local
152	Francisca Nuvor	f	eng
153	Peris Wairimu	f	eng
154	Adhe Dida	f	eng/local
155	Adhe Dida	f	eng/local
156	Njeri Meresa	f	eng/local
157	Mugini Jacob	m	eng/local
158	Bonny Kipchirchir	m	eng/local
159	Salma Said	f	eng/local
160	Mugini Jacob	m	eng/local
161	Thomas Onyiego	m	eng/local
162	Bonny Kipchirchir	m	eng/local
163	Salma Said	f	eng/local
164	Thomas Onyiego	m	eng
165	Adhe Dida	f	eng/local
166	Edward Kwame Aklade	m	eng
167	Mugini Jacob	m	eng/local
168	Beryl Omunya	f	eng
169	Njeri Meresa	f	eng
170	Walter Wilson Nana	m	eng
171	Njeri Meresa	f	eng
172	Yusuf Maleli	m	eng/local
173	Abisae Maeda	m	eng/local
174	Yusuf Maleli	m	eng/local
175	Njeri Meresa	f	eng
176	Beryl Omunya	f	eng
177	Njeri Meresa	f	eng
178	Thomas Onyiego	m	eng
179	Mugini Jacob	m	eng/local
180	Nick Fred Okoth	m	eng
181	Edward Kwame Aklade	m	eng
182	Yusuf Maleli	m	eng/local
183	Salma Said	f	eng/local
184	Yusuf Maleli	m	eng/local
185	Yusuf Maleli	m	eng/local
186	Abisae Maeda	m	eng
187	Njeri Meresa	f	eng
188	Nassra Mohamed Khatib	f	eng
189	Njeri Meresa	f	eng
190	Thomas Onyiego	m	eng
191	Nick Fred Okoth	m	eng
192	Ibrahim Issa Kasia	m	eng/local
193	Salma Said	f	eng
194	Francisca Nuvor	f	eng
195	Mugini Jacob	f	eng
196	Nick Fred Okoth	m	eng
197	Abisae Maeda	m	eng/local
198	Mugini Jacob	f	eng
199	Bonny Kipchirchir	m	eng/local
200	Njeri Meresa	f	eng
201	Kester Aburam Korankye	m	eng
202	Kester Aburam Korankye	m	eng

203	Njeri Meresa	f	eng
204	Salma Said	f	eng
205	Beryl Omunya	f	eng
206	Edward Kwame Aklade	m	eng
207	Yusuf Maleli	m	eng/local
208	Adhe Dida	f	eng
209	Adhe Dida	f	eng/local
210	Mugini Jacob	f	eng/local
211	Njeri Meresa	f	eng/local
212	Francisca Nuvor	f	eng
213	Beryl Omunya	f	eng/local
214	Edward Kwame Aklade	m	eng
215	Bonny Kipchirchir	m	eng/local
216	Mugini Jacob	m	eng/local
217	Bonny Kipchirchir	m	eng/local
218	Francisca Nuvor	f	eng/local
219	Francisca Nuvor	f	eng/local
220	Njeri Meresa	f	eng
221	Nick Fred Okoth	m	eng
222	Kester Aburam Korankye	double	
223	Njeri Meresa	f	eng
224	Yusuf Maleli	m	eng/local
225	Francisca Nuvor	f	eng/local
226	Nick Fred Okoth	m	eng
227	Njeri Meresa	f	eng/local
228	Francisca Nuvor	f	eng
229	Bonny Kipchirchir	m	eng
230	Bonny Kipchirchir	m	eng
231	Francisca Nuvor	f	eng/local
232	Adhe Dida	m	eng
233	Nick Fred Okoth	m	eng
234	Beryl Omunya	f	eng

Report Number	Local participants	Local issues	Target group	Instructions for action	Empowering function	Gender topic	Gender target
1	par1	iss3	tar3	act9	emp3	gen2	gen4
2	par1	iss1	tar2	act1	emp9	gen2	gen4
3	par1	iss2	tar2	act9	emp9	gen2	gen4
4	par1	iss9	tar3	act9	emp9	gen2	gen4
4	par1	iss1	tar2	act9	emp9	gen2	gen4
5	par1	iss2	tar2	act9	emp2	gen2	gen4
6	par1	iss1	tar3	act9	emp9	gen2	gen4
7	par1	iss4	tar3	act9	emp9	gen1	gen4
8	par1	iss1	tar1	act9	emp9	gen2	gen4
9	par5	iss3	tar3	act9	emp3	gen2	gen4
10	par4	iss2	tar2	act9	emp2	gen2	gen4
11	par1	iss1	tar1	act1	emp2	gen2	gen4
12	par5	iss2	tar2	act2	emp9	gen2	gen4
13	par1	iss4	tar3	act3	emp9	gen2	gen4
14	par1	iss1	tar2	act9	emp9	gen2	gen4
15	par2	iss2	tar3	act9	emp9	gen2	gen4
16	par1	iss1	tar1	act9	emp1	gen2	gen4

17	par1	iss2	tar2	act9	emp4	gen2	gen4
18	par1	iss2	tar2	act9	emp9	gen2	gen4
19	par1	iss3	tar3	act9	emp4	gen1	gen3
20	par1	iss4	tar3	act3	emp4	gen2	gen4
21	par1	iss4	tar2	act3	emp4	gen2	gen4
22	par4	iss4	tar3	act9	emp4	gen2	gen4
23	par1	iss4	tar3	act3	emp4	gen2	gen4
24	par1	iss2	tar3	act2	emp9	gen2	gen4
25	par4	iss4	tar4	act4	emp4	gen1	gen3
26	par1	iss1	tar1	act1	emp9	gen2	gen4
27	par9	iss9	tar3	act3	emp9	gen2	gen4
28	par5	iss4	tar2	act2	emp4	gen2	gen4
29	par9	iss4	tar4	act4	emp4	gen2	gen4
30	par1	iss1	tar1	act9	emp9	gen2	gen4
31	par1	iss2	tar2	act9	emp2	gen2	gen4
32	par4	iss3	tar3	act3	emp3	gen2	gen4
33	par1	iss1	tar1	act9	emp9	gen2	gen4
34	par1	iss4	tar2	act2	emp4	gen1	gen3
35	par1	iss1	tar1	act9	emp1	gen1	gen4
36	par4	iss4	tar2	act4	emp4	gen1	gen3
37	par1	iss3	tar3	act3	emp9	gen2	gen4
38	par5	iss2	tar2	act9	emp2	gen2	gen4
39	par4	iss3	tar3	act3	emp4	gen1	gen3
40	par1	iss1	tar1	act9	emp9	gen2	gen4
41	par1	iss1	tar1	act1	emp9	gen2	gen4
42	par5	iss4	tar4	act4	emp9	gen2	gen3
43	par5	iss1	tar1	act9	emp1	gen1	gen4
44	par5	iss4	tar4	act9	emp4	gen2	gen4
45	par1	iss3	tar3	act3	emp9	gen2	gen4
46	par1	iss1	tar1	act9	emp1	gen2	gen4
47	par1	iss4	tar2	act9	emp4	gen2	gen4
48	par1	iss1	tar2	act9	emp1	gen1	gen4
49	par1	iss2	tar3	act9	emp3	gen2	gen4
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**Report
Number**

Link

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