

Graduate School Course: SIMV24

Master of Science in Development Studies Term: Spring 2016

Major: Development Studies Supervisor: Yahia Mahmoud

A critical analysis of the alternative energy-poverty discourse with a case of Kasese district in Uganda

New sites, actors, identities, language, and visions of power

Author: Adventino Banjwa

Dedication

To all friends in the struggle to decolonize our worldviews

TABLE OF CONTENTS

Introduction					
	research	research questions			
	the stru				
1.	A cr	itical review of literature			
	1.1.	energy and sustainable development			
	1.2.	the energy crisis: crisis due to simplicity?	6		
	1.3.	the case for alternative energy technological solutions	8		
	1.4.	envisioned payement mechanisms	9		
	1.5.	critical voices	11		
2.	theo	retical framework	13		
	2.1.	post-development theory	14		
	2.1.	1. critiques against Post-development	16		
3.	onto	logical and epistemological assumptions	18		
4.	metl	nodology	19		
	4.1.	critical discourse analysis as method	19		
	4.2.	case study	22		
	4.3.	Semi-structured Interviews	23		
	5.4.	the study material	24		
	4.4.	ethical considerations	20		
5.	anal	ysis	28		
	5.1.	discursive context: Kasese District and the Clean Energy Champion District Initiative	28		
	5.1.	1. the clean energy champion district initiative	29		
	5.2.	So, what exactly is the problem?	32		
	5.3.	obstacles to the problem	33		
	5.3.	1. analysis of the conjuncture	33		
	5.3.2	2. Analysis of the practice	34		
	5.3.3	3. analysis of the discourse moment	35		
	5.4.	function of the problem	45		
	5.5.	possible ways past obstacles	46		
	cont	radictions	47		
	than	ks, but wait a minute	48		
	5.6.	Post-development, Poverty alleviation practices, and Sustainable Development	50		
	Sustainable development		50		
	poverty and practices to alleviate it		52		
	alternative energy practices and basic needs		53		
	5.7. reflection on the analysis				
6.	Con	clusions	57		
R	References				
ap	appendices				

Abstract

One of the central themes in recent sustainable Development debates is the idea that

alternative energy technological solutions can also alleviate poverty in parts of the global

South. This idea is earmarked in this study as the alternative energy-poverty discourse.

Drawing on Critical Discourse Analysis and Post-development theory; the study questions the

extent to which the premise of this discourse is possible by carrying out an analysis of

discourses of different actors on a renewable energy project in Kasese district, western

Uganda. Basing on its language on poverty and the measures proposed to address it; the

study finds that the alternative energy-poverty discourse, in many ways, has an ideological

relationship with the mainstream Development agenda, in which the logics of the latter are

reinforced by the former. It is to be emphasized that the current upsurge of optimism around

renewable energies and their relationship with social questions like poverty needs to be

transcended, even subverted, if social problems connected to the 'old' energy regime are to

be effectively addressed in the regime of renewables. Social questions like poverty are

complex. Attempts to address them need to embrace this complexity. There are no 'easy

answers'. 'Easy answers', like most of those advanced by many promoters of renewable

energies in places like Kasese, should be treated with deep suspicion. There is need for an

honest debate regarding new forms of energy and social questions like poverty, a debate that

can, indeed, be enriched by insights from Post-development theory.

Key Words: Alternative energy technologies, Poverty Alleviation, Sustainable Development,

Post-development theory, Critical Discourse Analysis, Uganda, Kasese district, Champion

District Initiative.

Text word count: Approx. 22,000 words

iii

Acknowledgements

It is practically impossible to acknowledge each and every one's contribution to any life endeavor. As social beings, we are inherently implicated in webs of social relationships in different places at different times – relationships that have significant implications for all our endeavors. For that reason, I extend a general gratitude to each single person who contributed, in one way or another, to the realization of this study. I will however mention the Swedish Institute (Si) whose funding made possible both my study of a Master's in Development Studies and its core and final result, this study. I also greatly acknowledge the efforts of my supervisor and friend, Yahia Mahmoud, for the relentless support throughout the process, and for the innumerable engaging conversations we have had throughout the period apropos my study and other aspects of (social) life generally. My family, thank you so much for all forms of support. Finally, I also thank all my friends and classmates at the Lund University Graduate School of Social Sciences for the many enriching discussions we have always had that have had a critical bearing on my study.

INTRODUCTION

"The campaign to turn traditional man into a modern man has failed. The old ways have been smashed. The new ways are not viable. People are caught up in the deadlock of development..." (Sachs 2010: xviii).

As the world proceeds to embrace the 'second internationalized Development agenda' under the banner of 'Sustainable Development Goals' (SDGs); a multitude of discourses and accompanying practices are struggling to demarcate new boundaries, new spaces and new frontiers for the Development² agenda in an age which some Development optimists have termed 'the age of Sustainable Development'³. Like the Millennium Development goals (MDGs), SDGs, too, nodalize the goal of 'alleviating poverty'. Whereas MDGs attempted to halve, globally, the incidence of 'absolute poverty' by the year 2015; SDGs envisage 'ending poverty' in all its forms everywhere on planet Earth by the year 2030⁴. As a result, a plethora of practices and interventions of different kinds have been proposed, and many are already being deployed, to transform this dream into reality.

In this new 'age of Sustainable Development', there is an emerging articulation that 'poverty', seen to have persisted in the so-called "third-world" countries despite decades of interventions, can also be eradicated with interventions of 'sustainable' – that is, 'clean', 'low carbon', 'renewable', 'alternative', 'modern' and 'affordable' – energy technological solutions⁵. Briefly, the standard storyline goes like this: 'the poor' peoples' energy practices, specifically their 'absolute dependency' on 'traditional' (that is; 'un-modernized' or rather, uncommodified) biomass is not only harmful to 'the environment' and the 'non-poor'; it also worsens their poverty. To 'help' 'the poor' switch to 'modern alternative/renewable' energy

¹Throughout the Thesis, 'the second internationalized Development agenda' is used in reference to the 'Sustainable Development Goals' (SDGs) 2015-2030. On the other hand, 'the first internationalized Development agenda' is used in reference to the first deliberate target/goal-based 'international' Development agenda (Millennium Development Goals – MDGs) which officially ended in 2015. Of course the Development agenda did not get 'internationalized' with MDGs and SDGs. However, MDGs, and now SDGs, ushered in, for the first time, such time-specific goals on such a scale.

²I will use the word 'Development' in capitalized form for two or three reasons. The first is in line with Escobar's usage (See Escobar, A 1992, 'Reflections on 'development'. Grassroots approaches and alternative politics in the Third World', *Futures*, 24, 5, p. 411-436), that is, to imply Development as a historical construct. I also capitalize when I am referring to the field, that is, the field of 'Development Studies'. Finally, to distinguish 'Development' as used in both the above two scenarios from other 'developments' for example, 'the development of capitalism', 'the development of technology' and so on.

³See for example Jeffery Sachs's 2015 publication on "The age of Sustainable Development" (*The Age Of Sustainable Development*, n.p.: New York: Columbia University Press)

⁴ Goal 1 of the SDGs aims at "ending poverty in all its forms everywhere". See: http://www.un.org/sustainabledevelopment/poverty/

⁵These energy technologies range from solar (solar-thermal and solar photovoltaic), to hydro-power, wind energy, bio-power (biogas, biomass, biofuel etc.) to mention but a few. In reference to these energy technologies, phrases "new energy technologies", "alternative energy technologies", "renewable energy technologies" will all be used interchangeably throughout this work.

forms is not only good for 'the environment' and the 'non-poor'; if 'the poor' use these energies in 'productive' ways; 'clean energy technologies' can also solve their poverty.⁶

Such a storyline, without doubt, has attracted a number of actors to intervene in different localities of the global South to effect a new possibility: the possibility to eradicate 'poverty' in an 'environmentally sound' way with interventions based on alternative energy technological solutions.

As a result, a discursive assault on 'traditionality' in energy use is sustained while, at the same time, recognizing catastrophic failures of earlier⁷ attempts to 'modernize' the traditional subject. This claim to 'technologically' alleviate poverty through such alternative energy technological solutions, earmarked here as 'the alternative energy-poverty discourse', needs to be seriously examined and this work is an attempt to carry out such a task.

Generally, I analyze this *alternative energy-poverty discourse* in light of the Development practice that is, and has been, transmogrifying itself in such a way that hides its ambiguities, a condition (seemingly) necessary to keep it relevant in parts of the global south like Uganda. In so doing, the main objective of the study is to critically describe and analyze the Development discourse with specific focus on one of its new discursive trends, that is, the coupling of poverty and 'new' energy forms.

δΔ few illustrative examples may

⁶A few illustrative examples may suffice for now. For instance, United Nations Energy/Africa (2007) recommended that "[i]n order to sustain the encouraging overall growth of African economies of the recent past and also to make substantial progress in overcoming the poverty challenge on the continent, African nations would need to address various challenges in the energy sector. This would require increasing access of the majority of Africa's population to electricity. *The continent would also need to deal with the high usage of traditional biomass fuels to meet the energy needs for cooking and heating of most Africans*." (see UN Energy/Africa 2007: vii. Italics mine. cf. UN Energy (2016): "Energy is critical to tackling poverty eradication, while decarbonizing energy is central to mitigating climate change. Energy powers opportunities. It transforms lives, economies and countries." Available: http://www.un-energy.org/stories/13638-2030-agenda-for-sustainable-development).

For the Global Environmental Facility (GEF 2009); 'poverty' and 'climate change' are the two most daunting challenges faced by 'developing economies' in their process of 'expansion'. Hence, it suggests, "[c]lean energy technologies are vital to alleviating poverty, expanding rural development, and maintaining environmental quality. The productive use of renewable energy in rural areas helps raise incomes and improve health, providing power to pump water for irrigation, to process crops and power cottage industries, to light homes, schools, and hospitals—all services of premier importance and immeasurable impact in the remote rural areas." (GEF 2009: 3. Italics mine).

The World Bank's World Development Report 2016 (see World Bank 2016) similarly renforces this position: "Reliable and affordable access to electricity services is fundamental to achieving the World Bank Group's twin goals: shared prosperity and elimination of extreme poverty by 2030." (World Bank 2016: 288ff. Also available: https://openknowledge.worldbank.org/handle/10986/23347).

Finally, in his 2011 'vision statement' for 'sustainable energy for all' (which preceded the United Nations General Assembly's resolution 65/151 which declared 2012 as the 'international year of sustainable energy for all'. See: http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/65/151), the then United Nations Secretary General, Ban Ki Moon emphasized that "[s]ustainable development is the imperative of the 21st century. Protecting our planet, lifting people out of poverty, advancing economic growth – these are different aspects of the same fight. We endeavor to create new business and market opportunities, new jobs, and new possibilities for human advancement. We will not achieve any of these goals without energy – sustainable energy for all. To defeat poverty and save the planet, we can, and must achieve sustainable energy for all by the year 2030." (Moon 2011: 3-4, Italics mine. Available:

 $[\]underline{http://www.se4all.org/sites/default/files/l/2013/09/SG_Sustainable_Energy_for_All_vision_final_clean.pdf).}$

⁷From colonial attempts "to civilize", "to save" this subject, to post-independence attempts as those spread through state-led import substitution 'catch-up' industrialization.

The investigation is based on the analysis of one key case, the case of Kasese district in South-western Uganda where different actors have ascended upon the district to effect a district-wide initiative, the first one of its kind in the country, under the banner of "The Kasese Clean Energy Champion District Initiative". Their stated overriding goal is to advance the uptake of alternative energy technological solutions of different kinds in the area as *modus operandi* for *inter alia* alleviating 'poverty', seen to be bedeviling majority of the district's residents. Such an initiative, in a country like Uganda well-represented statistically as one of the 'energy poorest' countries in the world, is crucial to a study as this.

I analyze semi-structured interviews which I conducted with the different actors on the initiative and citizens in the district during the months of February and March, 2016. Interview texts are augmented by other texts that I found critical to strengthening the analysis. All this is done with the aid of Norman Fairclough's Critical Discourse Analysis (CDA). To gain insights into the wider Development practice(s) to which the alternative energy-poverty discourse is part; I draw on a body of Post-development theory¹⁰.

Basing on its language on poverty and the measures proposed to address it; the study finds that the alternative energy-poverty discourse, in many ways, has an ideological relationship with the mainstream Development agenda, in which the logics of the latter are reinforced by the former. It is to be suggested here that the current upsurge of optimism around alternative energy technological solutions and their relationship with social questions like poverty needs to be transcended, even subverted, if social problems connected to the 'old' energy regime, that of fossil-fuels, are to be effectively addressed in the 'new' one, that of renewable energies. Social questions like poverty are complex. Attempts to 'address' them can succeed in as much as they succeed in embracing the whole complexity of these questions. There are no 'easy answers'. 'Easy answers', like most of those advanced by many adherents of renewable energy technological solutions in the global South, should be treated with deep suspicion. There is need for an honest debate regarding new forms of energy and social questions like poverty, a debate that can indeed be enriched by insights from Post-development theory.

۰..

⁸Sometimes simply called "Kasese Champion District Initiative".

⁹See for example in Brew-Hammond and others: 'Energy poverty in Sub-Saharan Africa: Poverty amidst abundance'. Available: http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199682362.001.0001/acprof-9780199682362-chapter-15

¹⁰It has to be noted that at the time of this writing, only a handful of articles and research projects have set out to draw, explicitly, on "Post-development theory" and literature. Perhaps one of the reasons is that given by one of its fiercest critics – Jan Nederveen (Nederveen 2000), that is, that the approach is new and its theoretical tools are still under ongoing construction. As a result, I am convinced that research projects like this one are critical not only in giving more fresh to the body of Post-development but also, and crucially, in contributing to further refinement of the theoretical premises and tools of Post-development.

RESEARCH QUESTIONS

Based on the above, therefore, the lead-research question for this deliberation is:

To what extent can alternative energy technologies contribute to alleviation of poverty according to particular discourses?

In attempting the above main research question; the following sub-questions have been considered:

- I. How can alternative energy technological solutions alleviate poverty?
- II. How is the alternative energy-poverty discourse constructed?
- III. How is 'poverty' conceived by actors engaged in alleviating it through advancing alternative energy technological solutions?
- IV. What role does the alternative energy-poverty discourse play in (sustainable) Development practices?
- V. How can insights from Post-development thinking contribute to a wider understanding of the poverty alleviation practices and the wider (sustainable) Development practice(s) generally?

THE STRUCTURE

The rest of the work is divided into six parts. In Chapter one, 'A critical review of Literature' is conducted mainly to map out key themes that have dominated the debate as well as identifying gaps to the filling of which this work aims to contribute. The review locates energy in sustainable development debates as well as paying critical attention to the way the 'energy crisis' is portrayed in mainstream discourses, the arguments for alternative energy technologies, the means of payment for these new energies, and finally engages with critical voices. In Chapter two, the thesis' theoretical framework is laid out. This framework is built in an embeddedness of Critical Discourse Analysis as theory and Post-development theory. This is followed by Chapter three, where the ontological and epistemological position(s) held in this thesis are discussed. Chapter four is about methodology. Here; 'critical discourse analysis', 'case study method' in research as well as 'semi-structured interviews' in data collection are advanced. Methodology is then followed by Chapter five (Analysis) where I introduce and give an elaborate context to the case of Kasese district in Uganda upon which this study is based. In the same chapter, with the guide of the research questions above, the case material (texts from interviews and elsewhere) are analyzed using Norman Fairclough's new framework for Critical Discourse Analysis. The theoretical discussion, which directly responds to the final sub-question, draws on Post-development theory. Finally, conclusions from the study are discussed in chapter six.

1. A CRITICAL REVIEW OF LITERATURE

The widespread belief that clean and abundant energy is the panacea to social ills is due to a political fallacy, according to which, equity and energy consumption can be indefinitely correlated, at least under some ideal political conditions. Labouring under this illusion, we tend to discount any social limit on the growth of energy consumption (Illich 1974:5. Italics mine).

The illusion that Western prosperity was created by science and technology – an illusion promoted with tremendous naivety by [former U.S. Presidents] Truman and Kennedy, but which is no longer seriously supportable – has recently been resurrected again by a few people with exceptional faith in new generations of technology allegedly able to 'handle' the environmental problems that have resulted...these optimists...now believe that solutions can be found without a sacrifice of prosperity, as a result of the 'ecological modernization' of industry (Ullrich 2010: 316. Italics mine).

Recent decades have seen a proliferation (social scientific) research featuring 'Sustainable Development' practices of all kinds. 'Sustainability', thanks to the Brundtland report (WCED 1987) and other antecedents¹¹, has become a fashion, a catchphrase within the Development field in the name of which many Development practices have come to be justified. Wolfgang Sachs captures this new obsession in a poetic fashion: 'no sustainability without development' has followed 'no development without sustainability' (Ibid: 2010: 28; 1999). The very semantic construction of the second internationalized Development agenda (2015-2030), that is, as 'Sustainable Development Goals¹²', clearly attests to this new development. But as before, the claim of desiring to alleviate poverty¹³ is central to these goals¹⁴.

1.1. ENERGY AND SUSTAINABLE DEVELOPMENT

The subject of energy has been, and is, nodal in many Sustainable Development debates¹⁵. However, not any form of energy. What appears to make Sustainable Development distinctive is not a general emphasis on the vitality of access to energy in societies¹⁶; it is, rather, the

¹¹Among others the 1972 Stockholm International Conference on the human environment (see Kates et al., 2005).

¹²For these goals, see for example 'Open Working Group Proposal for Sustainable Development Goals and Targets' 2015, *International Law News*, 44, 1, pp. 5-46. The list of the 17 goals is also available on the United Nations Website: http://www.un.org/sustainabledevelopment/sustainable-development-goals/

¹³Sachs (2010:27) observes that this claim, the claim to alleviate poverty has been central to the whole development ideology since its launch by U.S. President Truman in 1949.

¹⁴The very first goal of the SDGs agenda aims to "End poverty in all its forms anywhere" by 2030. See: http://www.un.org/sustainabledevelopment/poverty/

¹⁵It may suffice for now to mention that "energy access" was generally considered as "the missing goal" in the MDGs (see Sapkota et al., 2013; Käkönen & Kaisti 2012. See also UN Energy 2005). Most recently the United Nations Secretary General, Mr. Ban Ki Moon, launched 2012 as a United Nations "international year for sustainable energy access for all". As for the 2015-2030 second internationalized development agenda, a full goal, goal number 7, has been earmarked to "ensure access to affordable, reliable and sustainable modern energy for all" by the year 2030! (see: http://www.un.org/sustainabledevelopment/energy/)

¹⁶The subject of energy is not new in social scientific debates. As an example; Guruswamy (2011) notes that these debates can be traced way back to the 1800s (Ibid: 142). The subject is also not new with regards to Development, for, the role energy plays in Development has been part, in different ways, of all previous Development narratives (see for example Bhattacharyya 2014).

official problematization of conventional energy forms and the outright promotion of renewable energy technological solutions ¹⁷.

As will be indicated later in this review, a great deal of literature on the subject consecrates these alternative energy technologies with what can be called a 'dual mandate¹⁸'. On the one side, alternative energies are being marketed as a tool to 'fight poverty' in 'poor countries', particularly targeting their rural populations who are yet to be 'electrified' into modern life. On the other hand, these technologies are being promoted as a climate change mitigation and adaptation strategy.

Before proceeding any further, some demarcations are necessary. First of all, in line with the focus of this study, this review mainly focuses on one side of the above 'dual mandate', i.e., on literature regarding the construction of alternative energy technologies as a poverty alleviation tool. Context-wise, much as the review generally embodies literature that focuses on the abstract category 'third world'; I am keen to dwell much more on research and debates focusing on Africa, specifically Sub-Saharan Africa¹⁹.

1.2. THE ENERGY CRISIS: CRISIS DUE TO SIMPLICITY?

Almost by default, most writers whose writings depict social aspects of different alternative energy technologies begin their deliberations by citing statistics²⁰ indicating the global status of energy access, quoting from 'authoritative' entities like the International Energy Agency (IEA), World Bank, UN Energy among others. In these figures, a form of crisis seemingly resulting from 'low energy consumption' is depicted. Repeatedly, "the energy poor"²¹ are faulted for their "inefficient", "low", "undeveloped", "environmentally deadly" and "unhealthy" modes of energy consumption (e.g. Halff et al., 2015; REN21 2014; IEA 2011;

¹⁷Conventional energy forms, that is, fossil fuels (coal, oil, and natural gas) and renewable energy technologies like Solar, Hydro-power, Wind, Bio-energies, and the like.

¹⁸ To borrow a phrase from the British colonial lexicon.

¹⁹For emphasis sake, the specificity of Sub-Saharan African focus is mainly due to the fact that the region, where Uganda – a country in which the case to be analyzed – is located, shares a general collective representation as a worst case scenario for energy and poverty in Africa.

²⁰Such statistics are presented as neutral descriptions of the reality on the ground. As if such figures are not accompanied by words, by statements that describe reality in particular ways – excluding other possible ways of describing it. But just as Escobar (1995) observes: "Statistics tell stories. They are techno-representations endowed with complex political and cultural histories. Within the politics of representation of the Third World, statistics...function to entrench the development discourse, often regardless of the political aim of those displaying them." (Ibid: 213).

²¹As they are commonly called (see for example in the chapter by Sovacool, "Defining, measuring, and tackling energy poverty" in Halff and others – Halff, A, Sovacool, B, & Rozhon, J 2015, *Energy Poverty: Global Challenges And Local Solutions*, n.p.: Oxford: Oxford University Press. (see also Gonzalez-Eguino 2015; Guruswamy 2011; Kammen & Kirubi 2008.) The distinction between "the poor" generally and "the energy poor" matters less. As it appears, all those viewed as poor generally are also viewed as poor in the energy sense. Is it by accident that sub-Saharan Africa, widely seen as the home of global poverty, is also treated as the center of global "energy poverty"?

Practical action 2010; Karekezi et al., 2004; Karekezi et al., 2005; Karekezi & Kithoma 2003; Barnes & Floor 1996).

It is apparently indicated that around 1.3 billion people lack access to electricity globally, nearly half (45 per cent) of which are believed to be housed in SSA. Up to 2.7 billion, it is indicated, consume energy in form of traditional/solid biomass (IEA 2011: 45). For instance; regarding the energy situation in SSA, the IEA²² has this to say in one of its recent reports:

An estimated 620 million people in sub-Saharan Africa do not have access to electricity, and for those that do have it, supply is often insufficient, unreliable and among the most costly in the world. Around 730 million people in the region rely on solid biomass for cooking, which – when used indoors with inefficient cookstoves – causes air pollution that results in nearly 600 000 premature deaths in Africa each year. Sub-Saharan Africa accounts for 13% of the global population, but only 4% of global energy demand (more than half of which is solid biomass). The region is rich in energy resources, but they are largely undeveloped. Almost 30% of global oil and gas discoveries made over the last five years were in the region, and it is also endowed with huge renewable energy resources, especially solar and hydro, as well as wind and geothermal. (IEA 2014: 28. Italics mine).

Such a description from IEA's "authoritative" report fits well in the mainstream diagnosis of the energy problem: the problem is not that some societies are consuming too much energy – with all its myriad implications; it is that some societies are consuming poorly, the low amounts of energy they manage to consume. Hence, the articulation of the 'positive' role alternative energies play – or will play– in changing lives of 'the poor' in the global South is accompanied, explicitly or implicitly, by the idea that 'low' or 'lack of' access to 'modern', and 'sustainable' energy services by countries of the South is a fundamental account for – and manifestation of – the prevalence and persistence of 'poverty' in these areas.

From the above IEA's text, the key words are: "lack" and "plenty" or, as other popular contributors to the subject – along similar lines – have put it; "poverty" alongside "abundance" (see Brew-Hammond et al., 2014). When the IEA's and other like-minded "energy experts" look at SSA and the rest of the "third world"; all they see are people whose energy consumption habits are incomprehensible. With images of private automobiles, electric kitchens and other "modern" modes of energy use stark in their mental models; these "experts" cannot see anything else in "traditional" modes of energy use other than archaic forms that have to be dismantled to pave way for "modern" ones.

For these "experts"; the contemporary "energy crisis" is happening in those places where "energy consumption" is still low, compared to world (read Western) standards. The

7

²²Marketing its annual reports since the '90s as "the world's most authoritative source of energy market analysis and projections" See: http://www.worldenergyoutlook.org/publications/

challenge consists of lifting people in such places from their 'backwardness'. Fortunately, the story goes, many of these places are naturally endowed – only that their "natural resources²³" are not yet– and therefore need to be – "developed". The tale goes on and on up to a point where the rationalization of the need for an American, European or any other multi-national company – with capital –to "develop" the hitherto "undeveloped" resources become more apparent. It reaches a point of forgetting that it is mainly due to the successful materialization of mental images depicted above in some places²⁴ that today's much decried global ecological catastrophe has been possible. Such "energy experts" cannot discern that perhaps this is the right moment to learn something from "poor" peoples' humbler ways of energy (and general material) consumption. Instead, SSA's reliance on "solid biomass for cooking", sunshine²⁵ for drying and other 'traditional modes of energy use' are described as "inefficient" and "unhealthy", resulting into hundreds of deaths. The idea, it seems, is that technology, despite driving humanity to the well-publicized edge of extinction ²⁶, is an irreplaceable and irresistible savior²⁷.

1.3. THE CASE FOR ALTERNATIVE ENERGY TECHNOLOGICAL SOLUTIONS

Part of the literature concentrates on advancing the case for different alternative energy technologies: their visions, uses, and strengths. Hence, a number of writers believe that "new" energies are a panacea to the environmental challenges of our time (e.g. Zanchi et al., 2013; Zulu & Richardson 2012; Omer 2008; Dincer 2000). On the other hand; some believe that the *magic* nature of these energies is in their ability to foster economic growth, create new jobs and generally run the economy in a lasting way, solving problems of poverty particularly in "poor countries" (e.g. Tumwesige et al., 2014; del Rio & Burguillo 2009).

²³Like the sun, forests, wind, oil and others.

²⁴Where, as some thinkers have observed words like "Enough" or "Sufficient" have been – or are being – aggressively displaced by a simple expression: "more is always good" (eg. Sachs 1999).

²⁵Without solar panels.

²⁶If we are to take serious the findings of the Inter-governmental Panel on Climate Change (IPCC) which stress that economic growth (driven by technological advancement) is one of the key human drivers of global warming. See IPCC, 2014: *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland. Available: https://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf
²⁷Otto Ullrich captures this in a more perfect way. He calls it a "lie" of modern industrialism, through which it is believed that "...the problems of an ever more apparent destruction of nature can be eliminated without sacrifice of prosperity *solely by technological means*, and that *the export of these 'productive' technologies will also allow the Third World to have a share in the much delayed promise of its material prosperity.*" (Ullrich 2010: 314f. Italics original).

²⁸In the context of the global South, these energies, of course, should be understood as "new" only and only in view of a technology that now accompany their promotion – the sun or sunshine plus a solar panel, a solar cooker, a solar water heater etc. Otherwise there is nothing new at all. From the sun, to wind, wood, and so on; these energies have already, since time immemorial, been critical in the way people produced their lives.

Elsewhere, the hope that these energies will bridge the 'gender gap' (e.g. Skutsch & Clancy 2006; Clancy et al., 2006; Oparaocha & Dutta 2006), fulfill the poor people's "basic needs" and boost the global economy through the creation of "new (alternative) energy markets" in "third world countries" (see Pachauri & Spreng 2004; Alanne & Saari 2004. cf. Goldenberg 2005), among others have all been advanced.

1.4. ENVISIONED PAYEMENT MECHANISMS

If the vision of global energy access embodied in the second internationalized Development agenda is one of "universal access to modern energy by 2030"; who will meet the costs, especially given the fact that that 'obvious' 'poor people's' identity – "the poor" – partly suggests that they cannot afford to pay financially? How will such 'economic cripples' ²⁹ access these new energy technological solutions?

There is a great deal of congestion here. Even the much-awaited July 2015 'Addis Ababa Action Agenda' (UN 2015) simply aided confusion³⁰. Whereas some have awakened the *ghost* of 'foreign aid' and the role of non-governmental organizations (see MacLean & Brass 2015; Kees & Feldmann 2011. cf. IEA 2011); others decry the disarming of the State, suggesting that its (forced) withdrawal from the process of electrification through (1980s-1990s neoliberal) reforms was premature (eg. Jamasb 2006).

Meanwhile, some contributors have emphasized the agency of "the poor" in meeting the cost of these new energy solutions. Here, it is suggested, all that is needed is total recruitment of 'the poor' into the money economy by emphasizing the "productive uses" of these energy technologies (see Brew-Hammond 2010; Brew-Hammond & Kemausuor 2009; GEF 2009; Martinot et al., 2002). To facilitate all this, it is added, a vibrant private sector is a necessary precursor (eg. Williams et al., 2015; Sonntag-O'Brien & Usher 2006).

The above approaches have been augmented by advocates for 'appropriate' financial packages for 'the poor'. Since 'the poor' peoples' major challenge in accessing alternative

²⁹To borrow from Illich (2010).

³⁰ This (non-binding) agreement generally incorporates every aspect of the overall means of financing sustainable development goals. The only aspect missing is the usual suspect: 'how?' Most of what was agreed upon was mere wishes. For example, regarding funding for new energy technologies, we read that participants resolved to "promote both public and private investment in energy infrastructure and clean energy technologies including carbon capture and storage technologies' and "substantially increase the share of renewable energy and double the global rate of energy efficiency and conservation, with the aim of ensuring universal access to affordable, reliable modern and sustainable energy services for all by 2030". Participants also committed to "enhance international cooperation to provide adequate support and facilitate access to clean energy research and technology, expand infrastructure and upgrade technology for supplying modern and sustainable energy services to all developing countries, in particular LDCs and SIDS." All these and more are, on the outlook, 'good' wishes. But it all, more or less, ends there.

energy technologies is financial; the solution lies, these advocates suggest, in designing 'appropriate' credit packages for them. Hence proposals like provision of 'micro-loans/credit' to enable 'the poor' fund the "modernization of their poverty" through renewable energies (eg. Laufer & Schäfer 2011) as well as 'higher purchase schemes' and improvement of 'distribution channels' (Doyle 2002) have been advanced. This way, to borrow from Ullrich (2010); 'Consume now, pay later' is, the dominant philosophy³². The need for "technology transfer" á la Wilkins (2002), investments in "rural infrastructure" (Cook 2011) have all animated this debate.

Another notable contribution is the idea of "Payments for Environmental Services" (PES) (see Wunder 2008, 2005, 2001; Sunderlin et al., 2005; Angelsen & Wunder 2003). Much as works of PES advocates are more directly concerned with "conservation" than energy; what is important to the energy debate is that these works tackle the issue of *poverty and tropical rainforests*, a key reason the "the poor" have been dragged into the whole sustainability (energy) talk³³.

The PES camp is mainly a camp of growth optimists. They believe that commodifying forests – user pay – is the best way to incentivize 'the poor' to conserve them for the good of all humanity (see Angelsen & Wunder 2003). They criticize another camp; one that advocates for Integrated Climate and Development Projects (ICDPs) (eg. Davidson et al., 2003; Beg et al., 2002) for their naïve conception of the issue of poverty and tropical rain forests: the disappearance of tropical rain forests, assert PES advocates, is not so much a result of poverty as it is of Development. If anything, they say, "poverty" features are the reason why some tropical rainforests still exist (Wunder 2001; Angelsen & Wunder 2003).

The role Development plays in the disappearance of tropical rain forests³⁴ is quite irrefutable. As others have indicated (eg. Shackleton et al., 2006; Fisher 2004), forests are key to the subsistence lifestyle of many people in the global South. But this subsistence lifestyle has been consistently represented by both PES and ICDPs proponents as constituting "poverty" – which calls for interventions to alleviate it. Yet by substituting "subsistence" with "poverty" – to which they propose "economic growth" mainly through commodifying forests; PES advocates miss the point through oversimplifying a rather complex subject of poverty. They

10

³¹To phrase the point in the sense of Illich (1974: 10).

³²Which, in a way, triggers a rather dramatic shift in the South's historical indebtedness – on top of the general (mediated) indebtedness of "the poor people" (through their governments) emerges their direct enslavement in foreign debts to multinational renewable energy companies.

³³That is, the idea that "poor" peoples' "unsustainable" use of 'forest (energy) resources' leads to environmental degradation, climate change, and, even more, worsens their poverty condition.

³⁴ And the destruction of nature generally.

therefore join the ranks of their opponents, advocates of ICDPs, in struggling to dismantle the very basis of life and survival for many people living near tropical rainforests.

1.5. CRITICAL VOICES

Some of the literature reviewed is critical to the *positive* alternative energy discourse on poverty. Hence, since the conventional view is that the disappearance of forests in the global South is mainly due to 'the poor' peoples' 'unsustainable' use of 'forest resources' ³⁵, a number of writers have questioned the basic assumptions held in this view, suggesting, instead, that "elements of poverty" ³⁶ in the global South are the custodians of tropical rainforests. Wherever Development has stepped a foot, forests begin to disappear ³⁷ (see Openshaw 2011. cf. Angelsen & Wunder 2003). An extension to that argument can be that such disappearance, after eroding the basis for *subsistence* life of many people (as somehow noted by Shackleton et al., 2006; Arnold et al., 2005; Fisher 2004 and others), creates *scarcity* which drags people into *destitution*. Such *destitution* is not *voluntary* as deliberate material restraint (*frugality*) is. It is, as Majid Rahnema observes, "imposed poverty" (Rahnema 2010. cf. Rahnema 1991. cf. Sachs 1992).

Some writers have also cast doubts in the central notion that alternative energies solve poverty. In East Africa, Arne Jacobson found that the only major recognizable achievement of alternative energies in people's lives is to act as a "connective power", where those with access simply gain (mediated) connectivity to the world through appliances like television sets (see Jacobson 2007). In addition, the dominant conception of poverty in these discourses – that is, 'poverty' as ahistorical and delinked from wealth, webs of power, social structures and relations – is equally challenged (eg. Clancy 2008). Others have faulted the viability of

³⁵Including forests as a source of the leading form of energy for 'the poor' (unmodernized biomass energy).

³⁶See my comments above on this notion of "elements of poverty", that is, the general misrepresentation of "subsistence" (as a mode of livelihood) as constituting "poverty" (as an undesirable social condition which requires intervention to eliminate it).

³⁷On the issue of deforestation and (economic) Development, an interesting example can be drawn from Uganda. In 2007, while pushing for his government's move to give away the country's largest tropical rainforest to a sugar producing company; the President of Uganda, Y.K. Museveni, wrote an opinion article in the country's official newspaper, the NewVision (available: http://www.newvision.co.ug/new_vision/news/1166704/support-mabira-forest-away-mehta#sthash.nswoTFVB.dpuf) arguing that he supported the giveaway of that forest for sugarcane production because "[t]he problem of Africa is not lack of forests but lack of factories, hotels, real estate, professional services (e.g medical, financial, etc)." He therefore wanted to industrialize the country as he puts it: "the urgent need for industrialising our very backward but rich country in terms of natural resources and raw materials. Our backwardness, at this stage, is on account of the absence of industries." Public resistance prevented this move, but, as he mentions in the article, his government had already successfully given away forest lands elsewhere in the country for industrial Development. As can be noticed, in saying that "the problem of Africa is not lack of forests but factories..."; what is said in the background, what is implied, is that because the problem is factories etc., we can therefore destroy forests to construct them – as if forest land is the only land where such Development monuments can be established.

many alternative energies like 'Solar Home Systems' (SHS) for their exorbitant prices and failure to meet 'the poor' people's core 'energy needs' especially cooking (see Wamukonya 2005; Bhattacharyya 2004).

Byrne & Toly's (2006) analyses both "conventional energy" and "sustainable energy alternatives" and find that both strands of energy have their feet held strong in major assumptions of unbridled capitalism. They point out that both streams venerate technology – "technical monuments" – and embrace *an authoritarian technological politics* where political power is either vested in technical experts or/and in market forces. In either case, they note, people lose their identity as active "citizens" to embrace a new one: that of "unquestioning consumers" (Ibid.).

Lastly, though not least; some have aimed at the dominant conception of the energy crisis as stemming from 'lack'. They maintain that solutions to contemporary global energy challenges lie not, as such, in the uplifting of the energy consumption levels of the so-called poor but, more crucially, in lowering that of the rich (see Trainer 2013; Almaroli & Balzani 2007). Here, Almaroli & Balzani's (2007) emphasis on the demand side of energy, on consumption rather than supply, is consistent with Illich's (1974) early influential emphasis on "social limits" to the expanse in energy consumption if social inequalities are to be overcome, and Ullrich's (2010) critical insight that it is a fallacy to believe that problems arising from industrial modernity³⁸ can be solved with the same logic³⁹ that created these problems in the first place without any "sacrifice of prosperity" (see Ullrich 2010: 315ff).

To sum up, Byrne & Toly (2006) observation on the subject becomes quite irresistible. They note:

"[C]ontemporary discourse on the subject is disappointing: instead of a social analysis of energy regimes, the field seems to be a captive of euphoric technological visions and associated studies of "energy futures" that imagine the pleasing consequences of new energy sources and devices." (Byrne & Toly 2006: 1)

Moreover, even when some writers forcefully question the assumptions of the different aspects of alternative energy solutions in relation to 'poverty'; most of them tend to naturalize the domain from which these energies emerge, that is, the domain of (sustainable) Development. This is where, I think, recent advances ushered into the field of Development Studies by Post-development thinking become useful. And I think imploring on such theory, which has barely been used on the subject, makes this thesis distinctive within critical Development Studies, and more specifically within the alternative energy-poverty debate.

³⁸As he notes; massive plunder and destruction of nature while externalizing costs.

³⁹That is, technology – now "new" energy technologies.

2. THEORETICAL FRAMEWORK

In this chapter; I lay out the theoretical framework for this study. Since I draw on more than one theory, this chapter can also be called "an integrated theoretical framework" where, as Jorgensen & Phillips (2002) notes, both theories "are adapted to one another and to the aim of the research project" (Ibid: 86). But why call it a 'theoretical framework' and not its sister phrase, 'conceptual framework'? As Green (2014) observes, mystery still pervades the usage of these twin phrases (see also Anfara & Mertz 2006). From Green's (2014) discussion however, it can be said that the choice of 'theoretical framework' here is somewhat in line with Fain's (2004) interpretation, i.e., the fact that this study is not as anchored on 'concepts' as on 'theories' (see Green 2014: 34f). Theory, as implied here, is a form of "lens" through which the phenomenon under study is observed (see Creswell 2014:86ff).

I have drawn on two theories in this study: 'Post-development theory' and Norman Fairclough's 'Critical Discourse Analysis'. The choice of these was strictly guided by the key objective of this study. 'Critical Discourse Analysis' as theory provides a basis for the view of the alternative energy-poverty *as* discourse, while elements from 'Post-development theory' are used in social analysis of the wider social practice of (sustainable) Development as well as guiding the theoretical discussion in chapter five (see section 5.6).

Critical discourse analysis maintains a view of 'discourse' as an 'element' (or 'moment') of a social practice. Social life is viewed as composed of 'social practices', and 'discourse' as one among the other 'elements' (or 'moments') of each social practice which are in a dialectical relationship with one another (see Chouliaraki & Fairclough 1999: 21f). Jorgensen and Phillips (2002) notes that "[d]iscourse analysis is not sufficient in itself for analysis of the wider social practice, since the latter encompasses both discursive and non-discursive elements. Social and cultural theory is necessary in addition to discourse analysis." (Ibid: 69). I employ aspects from Post-development theory for that purpose.

 $^{^{40}}$ Much as conceptual categories like 'poverty', 'basic needs', 'sustainable Development', 'renewable/alternative energy', and others are key to the study; what is more important is the theoretical category through which they attain meaning.

2.1. POST-DEVELOPMENT THEORY

In many parts of the world, "development" continues to be a main social and cultural force to contend with. Significant political battles are waged in its name, and the lives of many and the quality of people's livelihoods are still at stake in such battles (Escobar 2012: vii).

The idea of development stands like a ruin in the intellectual landscape. Delusion and disappointment, failures and crimes, have been the steady companions of development and they tell a common story: it did not work. Moreover, the historical conditions which catapulted the idea into prominence have vanished: development has become outdated. But, above all, the hopes and desires which made the idea fly are now exhausted: development has become obsolete. (Sachs 2010: xv. cf. Sachs 1999:3).

From the unburied corpse of development, every kind of pest has started to spread. The time has come to unveil the secret of development and see it in all its conceptual starkness. (Esteva 2010: 1).

'Basic needs' may be the most insidious legacy left behind by development. (Illich 2010: 95).

Development can be imagined as a draft that blows people off their feet, out of their familiar space, and places them on an artificial platform, a new structure of living. Under the heavy weight of the new structures, the cultural bedrock of poverty cannot remain intact; it cracks. (Ibid: 104).

The strength of the 'development' discourse comes of its power to seduce, in every sense of the term: to charm, to please, to fascinate, to set dreaming, but also to abuse, to turn away from the truth, to deceive. (Rist 2008: 1).

Post-development theory begins from the assertion the *age of Development* is ending. Hence Sachs (2010) contends that "[t]he time is ripe to write its obituary." (Ibid: xv). The theory maintains "that development as it is conceptualized and pursued within an orthodox, modern framework is not sustainable, that it produces a range of deleterious effects on mankind, society and nature..." (Andreasson 2010: 68). In this way, to paraphrase Marx & Engels (1998) [1848], the theory of Post-developmentalists may be summed up in a single sentence: abolition of Development.

In writing Development's "obituary" which Sachs (2010) refers to above, many Post-development thinkers critique *what has been* of Development, *what is* of it, and, in the end, try to imagine real *alternative* worlds that exist beyond Development ⁴¹. To be sure, the

theory and Critical Discourse Analysis compatible.

⁴¹As Chouliaraki & Fairclough (1999) note, contributing "to the awareness of what is, how it has come to be, and what it might be" is the "basic motivation of critical social science" (Ibid: 4). Post-development theory, in this case, like Critical Discourse Analysis, are located within critical social science. Post-development's prioritization of knowledge and practices of social movements in its theorization of "alternatives to Development" is in line with the recognition of the indebtedness of all critical social science to social movements (See Ibid: 9). The key word in Critical Discourse Analysis is *social change*. Just as it is in Post-development theory and literature. Therefore, in many ways, this and more makes Post-development

theorization of these alternative worlds as "alternatives to Development" 42 is the core theoretical preoccupation of Post-development theory.

Within Development debates, Post-development theory presents the most recent and most radical theoretical critique of Development. Arriving on the intellectual scene in the early '80s ⁴³ (Peet and Hartwick 2009: 197), Post-development theory took serious the (Development) crisis of the time which, in many parts of the global South, had created unprecedented ambivalence about Development⁴⁴. The resultant deconstructive analyses of Development by theorists in this school of thought did not lead to calls for "another Development" (see Escobar 2007: 19) or the need "to transform Development" to fit this or that context like previous critiques of Development had done⁴⁵. Post-development thinkers called for an end to the entire 'age of Development' (Escobar 2015: 454ff; Sidaway 2014: 229; Rist 2008: 6, 256ff; Agostino 2007; Matthews 2007; 2004: 374f; Peet & Watts 2002: 2; Escobar 1995: 205ff).

Rahnema (1997) observes that the term "Post-development" first appeared in 1991, by the meeting of a "colloquium sponsored by Eckstein Foundation". (Ibid: xi). But apart from the footnoted⁴⁷ report; one does not get far from that on the origins of Post-development. Perhaps, on this, Escobar (2012) has got an expanded view. He traces the roots of Post-development in Poststructuralism and postcolonial theories, that is to say, from the "analysis of development as a set of discourses and practices that had profound impact on how Asia, Africa and Latin America came to be seen as "underdeveloped" and treated as such." (see Ibid: xii). He goes on to capture the key preoccupations of Post-development: "decenter development" from being the key descriptor of conditions in the global South and "open up the discursive space

⁴²As opposed to "Development alternatives".

⁴³Although some celebrated members of the Post-development school, particularly Ivan Illich, had already, since the '60s, waged an intellectual war against the Development establishment, particularly through his radical critique of the institutions of modernity like schools and hospitals. Since the '80s, a number of writings have featured Post-development. The widely mentioned contributions at the time include Sachs's (1992) "The Development Dictionary: A guide to knowledge as power"; Rahnema & Bawtree's (1997) "The Post-development Reader"; Ziai's (2007) "Exploring Post-development: Theory and practice, problems and perspectives" to mention but three.

⁴⁴The 1980s marked what some writers have termed "the impasse in development studies" (See for example Schuurman 2014) and others particularly Economists decrying the lack of "economic growth" during that time hence calling it a "lost decade". See for example, Easterly's (2001) "The Lost Decades: Developing Countries' Stagnation in Spite of Policy Reform 1980-1998". Their writings projected a Programme of Development that had, by all standards, failed in its own game.

⁴⁵Generally speaking; Development has been subject to critique as early as its inception. In the context of Development Studies, it may suffice to mention the critiques to Development that emanated from Marxism such as the 'Dependency theory', 'World Systems Theory' and their corollaries. But these critiques were not directed to the entirety of the Development enterprise. In any case, Development still appeared as if it was a given. Only actions of some (developed) groups or forces emanating therefrom were decried as responsible for the "underdevelopment" of others. With such a conception, publications like Walter Rodney's (1972) influential "How Europe Underdeveloped Africa" and others became possible. Escobar (1992) notes that all such critiques still operated within the same "discursive space" of Development (P.26), which is why Post-development sharply differs from them.

⁴⁶This age is documented as having begun by U.S. President, Harry Truman on January 20, 1949 in his inaugural address. See Sachs (2010: xvi).

⁴⁷ See on P. xix

to other ways of describing those conditions"; putting an end to development by identifying "alternatives to development" (not "development alternatives") and finally; "transforming the political economy of truth bestowed upon Development experts' knowledge and power and replacing that with "knowledge and practices of social movements" (Ibid: viif).

Post-development theory, however, is not a uniform category. Ziai (2004), for example, identifies two factions: the "neo-populist version" and one which is dedicated to what he calls a pluralist "radical democracy" in the Laclau and Mouffe (1985) sense of the phrase. Ziai (2004) critiques the former category while promoting the latter, in which he places Arturo Escobar and others, as a constructive approach.

But much as, in recent times, writings that feature 'Post-development theory' have relatively increased (eg. Salleh 2016; McGregor 2009; Andreasson 2010⁴⁸, 2005; Morse 2008; Ziai 2007⁴⁹ and Matthews 2007, 2006; 2004); some still cast doubt on Post-development as a theory (eg. Nederveen 2000). On this point, it is vital to recall Escobar's (2007) call for the need to locate Post-development in the wider field of Development Studies in order to comprehend it properly. Escobar (2007) notes that:

Over the past 50 years, the conceptualization of development in the social sciences has seen three main moments, corresponding to three contrasting theoretical orientations: modernization theory in the 1950s and 1960s, with its allied theories of growth and development; dependency theory and related perspectives in the 1960s and 1970s; and critical approaches to development as a cultural discourse in the second half of the 1980s and the 1990s....These three moments may be classified according to the root paradigms from which they emerged: liberal, Marxist, and post-structuralist theories, respectively. (Escobar (2007: 18f. Italics mine).

2.1.1. CRITIQUES AGAINST POST-DEVELOPMENT

Since its rise in the '80s, a number of criticisms have been advanced against Post-development theory which I now briefly delve into. These criticisms have come from various angles within the field of Development Studies.

Core criticisms against Post-development theory⁵⁰ majorly stem from its central thesis: the intent to abolish Development. Indeed what is at stake in the whole Post-development project

.

⁴⁸Particularly Part I (P.13ff).

⁴⁹ Particularly part II which addresses the theoretical aspects of Post-development.

⁵⁰Mainly from defenders of the development establishment – at least bits of it.

is a lot⁵¹. How could anyone ever think of doing that? Hence Pieterse (2000) asks whether rejecting Development "is a tenable and fruitful position." (Ibid: 176). His reproaches against Post-development have ranged from accusing Post-development of concentrating on critique without construction, ideological preoccupation with discourse analysis, essentializing Development⁵², denying the agency of 'the poor' and romanticizing the local, to mention but a few (see Pieterse 2010: 110ff; 2000; 1998). Other criticisms (like Lie 2008; McKinnon 2008; Kiely 1999; Corbridge 1998) share a lot in common with the critiques of Pieterse highlighted above. Kiely (1999), for example, suggests a dialectical view of Development, one which emphasizes the 'contradictory unity of Development' – similar to Pieterse's (2000) "reflexive modernity/development".

Others like Ziai (2004) critique Post-development while recognizing the emancipatory potential in some aspects of it. Ziai (2004) particularly identifies two aspects of post-development: "reactionary populism" – which he (not unproblematically) associates with the works of thinkers like Majid Rahnema, Claude Alvares, and others – and "skeptical post-development", "a project for radical democracy" – which he identifies with the works of Arturo Escobar (eg. Escobar 2012), Gustavo Esteva (eg. Esteva 2010), Gilbert Rist (eg. Rist 2008) and others. Post-development thinkers have certainly responded to these concerns (see especially Escobar 2012: xiiiff; Rist 2008: 256ff; Matthews 2004).

⁵¹Not only the myriad "Development projects" that characterize today's "third world", but huge enterprises, people's ideas and knowledge they have for long professed about Development, whole international apparatus, from the United nations programmes, to the "modern state" apparatus that operates Development at the national level, etc. To suggest the rejection of Development, however deleterious it has been, seemed a rather ridiculous move to many.

⁵²That is, treating development as "Development", as a single category yet, according to him, it takes various forms.

3. ONTOLOGICAL AND EPISTEMOLOGICAL ASSUMPTIONS

As a general critique of the Development discourse from a point of view of its coupling of new forms of energy and poverty within 'Sustainable Development'; this thesis is anchored in the ontological and epistemological assumptions of critical social science and critical research. Specifically, the ontological and epistemological assumptions held here are not different from those embedded in critical discourse analysis regarding the nature of (social) reality and how we gain knowledge about it. Critical Discourse Analysis, particularly the version of Norman Fairclough drawn upon here, is rooted in, though not reducible to, social constructionism. Like many other definitions, the definition of 'social constructionism' is a contested one. Nevertheless, many scholars agree that there are shared premises within approaches that embrace the notion of 'social constructionism' including discourse analysis generally. These premises include a critical approach to taken-for-granted knowledge, historical and cultural specificity, link between knowledge and social processes, and link between knowledge and social action (Burr 2015: 5ff. cf. Jorgensen and Phillips 2002: 4ff).

However, despite the above key premises, there are differences within the movement. In the discourse analytical strand of social constructionism, the primary source of controversy is the nature of 'discourse' and its role in the constitution of social reality. CDA embraces a rather dialectical view of discourse and society (Fairclough 1989: 23f). Social life as generally "the object of study for social science" (Chouliaraki and Fairclough 1999: 20), is seen as comprising of networks of social practices and discourse is just one among other elements of social practices (Fairclough 2001, 1992: 62ff; Chouliaraki and Fairclough 1999: 21ff). In CDA, 'discourse' is both 'constitutive' of the social world and also 'constituted' by social structures. From this view of social life as 'partly discursive' and 'partly non-discursive', with social structures both 'constraining' and at the same time being 'transformed' by social action; Chouliaraki and Fairclough (1999) emphasizes a critical epistemology in critical social science as "constructivist-structuralism" or "structuralist-constructionism" (Ibid: 32).

This thesis, therefore, takes a critical perspective to the 'alternative energy-poverty discourse' and the Development discourse in general. The perspective is *critical* in the sense of what Chouliaraki and Fairclough (1999) calls a "transitive critique" (Ibid: 33) aiming at challenging the discursive 'misrepresentations' of lives of people in the area of study through a discourse that constructs them (interpersonally, relationally and ideationally) in diverse but contestable ways.

4. METHODOLOGY

The methods used in this study are purely qualitative. Bryman (1992) defines qualitative research as "an approach to the study of the social world which seeks to describe and analyze the culture and behavior of humans and their groups from the point of view of those being studied." (Ibid: 46; Bryman 2012: 399). To carry out such a task, this study applies CDA as a method of analyzing the interview material collected from (and other added materials/texts regarding) a case study in a specific social context. I now elaborate on CDA used as a method.

4.1. CRITICAL DISCOURSE ANALYSIS AS METHOD

The version⁵³ of CDA applied to this study – that of Norman Fairclough – puts forward useful tools on how to analyse discourse and its relationship with social processes and structures (Jorgensen & Phillips 2002: 64) which is based on its theorisation of (the moment of) discourse I go through in the following.

CDA is built upon the view of social life as an embodiment of 'social practices' of different types. Every social practice, if we take as an example an alternative energy practice, 'articulates' together dialectically related 'elements' of social life (such as material activities, values, subjects, forms of consciousness, discourse etc.), which it struggles to make 'moments' of its own (Fairclough 2001: 122; Chouliaraki & Fairclough 1999: 21ff; Jorgensen & Phillips 2002: 65). The key distinction between CDA and other discourse analytical approaches especially the 'discourse theory' developed by Laclau & Mouffe (1985) is the way both view the moment of discourse. For instance, whereas Laclau & Mouffe (1985) views the social as fully discursive; Norman Fairclough's CDA theorizes the social as partly discursive. Discourse is viewed as just one (irreducible) element of any social practice, which is in a dialectical relationship with other (non-discursive) aspects of such a social practice (Jorgensen & Phillips 2002: 66; Chouliaraki & Fairclough 1999: 28; Fairclough 1992: 70; 2001: 122ff; Titscher et al., 2000: 148ff).

Because language – and discourse in general – is such a crucial element in contemporary social life, Fairclough contends that social analysis has to pay attention to language use, hence conducting discourse analysis is a "productive" way of doing social research (Chouliaraki & Fairclough 1999: 38; Fairclough 2003: 3). But he cautions that the role discourse plays in any

⁵³Like Post-development theory; Critical Discourse Analysis is not a single category. There are many versions which correspond to different approaches to analysis and view of discourse. Among all contending versions, Fairclough's version is the most elaborate in terms of its theoretical assumptions and methodological tools for the social research (See Jorgensen and Phillips 2002: 60).

social process has to be proved through analysis (Fairclough 2001: 123; 2000: 169). Key to CDA, therefore, is, as Jorgensen and Phillips (2002) puts it:

"...to explore the links between language use and social practice. The focus is on the role of discursive practices in the maintenance of social order and in social change." (Jorgensen & Phillips 2002: 69f).

The term "discourse" is used by Fairclough to convey three diverse meanings: language as an element of a social practice⁵⁴; a particular usage of language in a given field (for example the 'economic discourse') and language used in a given way that constructs meanings from a particular perspective (for example the 'neoliberal discourse') (see Jorgensen and Phillips 2002: 66f).

CDA (generally) entails paying close attention to three levels in a communicative event – like research interviews which are part of this study: the 'text', the 'discursive practice' and the 'social practice'. These three aspects constitute Norman Fairclough's initial three-dimensional framework for discourse analysis (Jorgensen & Phillips 2002: 68ff; Fairclough 1992: 269; 1989: 62ff). But Norman Fairclough's framework for analysis of discourse has undergone tremendous transformation since the first three dimensional model. These changes are partly due to the "evolving" nature of CDA:

"...CDA as a method should be seen as constantly evolving as its application to new areas of social life is extended and its theorization of discourse correspondingly develops." (Chouliaraki & Fairclough 1999: 59).

Recent imports for example from Post-structuralism⁵⁵ have ushered changes in how to go about analysing discourse, much as CDA's core theoretical assumptions – about social life and the theorization of discourse in particular – have not changed. In the new framework (see Fairclough 2001: 125ff; Chouliaraki & Fairclough 1999: 33, 60ff); analysis is focussed on five stages which can be summarized below.

Norman Fairclough's new framework for critical discourse analysis

⁵⁴To conduct a critical analysis of discourse using Fairclough's approach most importantly presupposes treatment of 'discourse' as is in this instance, that is, 'discourse as an element of a social practice in dialectical relationship with other elements (Fairclough 2003: 3; 2001). Discourse, in this case, includes not only written and spoken language, but also nonverbal communication and visual images (Chouliaraki & Fairclough 1999: 38).

⁵⁵ As in the case of *discourse theory's* (Laclau & Mouffe 1985) concept of 'articulation'.

Level. Summary		
1. Specification of the problem.	 ✓ The problem is semiotic in nature ✓ Cognitive, such as a misrepresentations (leading to a 'transitive critique' as is the case with this study), or unmet discursive needs (leading an 'intransitive critique'). 	
2. Identification of obstacles to solving the problem.	 Here the focus is on finding out what is it with the problem that makes it difficult to being solved. Three aspects forms this part of the analysis: a) Analysis of the conjuncture ✓ Identification of the network of practices the discourse in focus is located b) Analysis of the social practice in focus ✓ Establishing, through analysis, the relationship between discourse (semiosis) and other 'elements' or 'moments' of the social practice. c) Analysis of the discourse moment i. Structural analysis – analysis of the order of discourse to which the discourse in question belongs ii. Interactional analysis ✓ Interdiscursive analysis – genres, discourses and styles drawn upon by a given communicative event ✓ Linguistic analysis – textual features of the communicative event. 	
3. Function of the problem in the practice.	Here concern is on whether the social order in question needs the problem to sustain itself.	
4. Possible ways past the obstacles.	The focus here is on alternative worlds that exist beyond the dominant discourse and the social order it cements through ideological operations.	
5. Reflection on the analysis.	Finally, "the analysis turns back on itself" (Fairclough 2001: 127). The question is whether or not the critique stands out as a critique – whether it is effective in siding with the "losers" and in contributing (as a resource) to social emancipation and change.	

The new framework as summarized above involves both 'negative critique' ⁵⁶ and a 'positive critique'⁵⁷, combining a 'relational' and a 'dialectical' analysis (Fairclough 2001, Chouliaraki & Fairclough 1999).

With the above two⁵⁸ versions of Fairclough's approach to CDA; the challenge becomes real on which way to proceed in any analysis. This brings into question the inherent instability of

The specification of obstacles to solving the problem under consideration (part two of the framework).
 The specification of ways through which such obstacles can be overcome (part four of the framework).

Fairclough's approach to discourse analysis – much as, as he emphasizes, instability is a mark of openness to change and applicability of CDA in different social aspects (Fairclough 2001; Chouliaraki & Fairclough 1999). Nevertheless, for purposes of this study, I have adopted the new framework as summarized above. Jorgensen & Phillips (2002) argue that this new framework is not that different from the first three-dimensional model and that both frameworks suffer from similar constraints regarding differentiation, in analysis, the discursive and the non-discursive elements of social practices. They therefore opted for the three-dimensional model to represent Fairclough's discourse analytical framework (Jorgensen & Phillips 2002: 71). I think the 'evolving' nature of CDA Fairclough emphatically emphasizes has to be taken more seriously. We can think of this evolving nature as 'improvements' parallel to the contemporary electronic metaphor of "updates" ⁵⁹. This enables a view of the new framework not as a replacement of the old per se, but as an 'update' or 'improvement' to it – making it fruitful to use it instead of the old version.

Like any aspect of critical social science; CDA is *critical* as an approach and so is the research conducted using it. CDA research is not *neutral*, that is, the interest in *emancipation* and social change is political in that the researcher takes sides. S/he takes the side of the weak, the oppressed in society⁶⁰ and the outcomes of the research process are resources in the fight against (discursive) injustices breeding social inequalities and unequal power relations in society (Jorgensen & Phillips 2002: 64f, 77).

CASE STUDY 4.2.

What can be the best way to critically describe and analyze one of the Development discourse's new discursive trend, that is, the combination of poverty and 'new' energy technological forms within the current 'sustainable Development' practices? This question kept resurfacing over and over again during the planning process for this study. In the process, it became evident that given the nature and purpose of this study, an elaborate case was crucial. Besides being a Ugandan myself - hence the general familiarity with the social context; the choice of Uganda, and Kasese district in particular, was crucially based on two inter-related factors. As already noted, Uganda⁶¹ is well known for its low per capita energy consumption, which is portrayed (in local and international energy policy circles) as one of

⁵⁸ The three-dimensional model and the new analytical framework outlined above

⁵⁹I am borrowing this metaphor from the electronic world. 'Updates' to a system or a software like windows for computers or iOS/Android for mobile phones are, strictly speaking, 'improvements' on the old versions, given new realizations regarding its functionings and so on.

⁶⁰Or as Fairclough puts it: "those who suffer from linguistic-discursive forms of domination and exploitation." (1995: 186)

⁶¹Together with a stream of other sub-Saharan African countries.

the constraints to the country's Development prospects. When I learnt (from local and international sources) that Kasese district (in Uganda) was vigorously advancing a multi-actor renewable energy access program whose targets, by far, supersedes those set nationally (and to some commentators, internationally – see sub-section 5.1.1); it obviously caught my attention. The stated objectives of this initiative (largely centered on 'poverty eradication') and the network of actors involved (local and international) all worked among others to influence its choice as a single case for this study.

Case study-based research is one "that investigates a few cases, usually just one, in considerable depth" (Hammersley & Gomm 2000: 3. cf. Flyvbjerg 2006: 220). Like any other approach, case study research has its own merits and drawbacks. One widely recognized merit of this approach is its ability to project a social issue at stake through the lens of a specific social context (Ibid; Bryman 1992: 64). Case study research also allows for incorporating, into the research design, a multiplicity of sources of evidence like documents, interviews, physical observation and others. And for research agendas like this one, where the core focus is on 'contemporary' social phenomena and events; case study offers invaluable opportunities (Yin 2009). Critique against case studies has mostly highlighted the difficulties in generalization⁶² of the case(s) (see Bryman 1992: 87ff). In addition, those who maintain a 'hierarchical view of research methods' continue to treat case study research as simply 'exploratory', that is, research which simply precedes other more "advanced" methods like surveys and historical studies (for descriptive purposes) and experiments (for explanation) (see Yin 2009: 6).

Such an attitude to research and methods in particular has however lost credence as more evidence continue to demonstrate how case studies can work for all purposes⁶³ (Yin 2009; Flyvbjerg 2006). It is not a central tenet of this study to generalize the case of Kasese in Uganda regarding new energy technological solutions and poverty alleviation. However, the typicality of its nature, which also crucially informed its selection, forecloses any underestimation of its usefulness in similar contexts.

4.3. SEMI-STRUCTURED INTERVIEWS

Any choice to employ an interview technique of data collection in qualitative research generally implies that one is faced with two possible alternatives: unstructured and semi-

-

⁶²Flyvbjerg (2006) demystifies this and many other claims against case studies.

⁶³That is, exploration, description and explanation as well as being relatively generalizable depending on the nature of the research project.

structured interviews (Bryman 2012: 469). Both have their pros and cons, and the choice of either (or a combination) of the two depends upon the overall constitution of the research agenda (Creswell 2007: 132f; Mason 2002: 65). For this study, I employed a semi-structured interview technique. One key advantage of using semi-structured interview technique relates to its flexibility⁶⁴ (eg. Bryman 2012:470f; Mason 2004; 2002: 62f). Additionally, having such a flexible structure is important if the researcher is keen to ensuring some degree of uniformity of all interviews, which aids the analytical process (May 2001: 137).

The design of the 'interview guide' and the topics/themes covered therein were generally generated from the research question(s). Themes-topics also partly guided the selection of interviewees (some actors with specific roles key to the study were selected basing on that). Beyond that, the selection was rather random, though general interest was in interacting with key actors on the energy project, local and international, as well as ordinary citizens on matters regarding alternative energies generally, and the energy project in the area.

5.4. THE STUDY MATERIAL

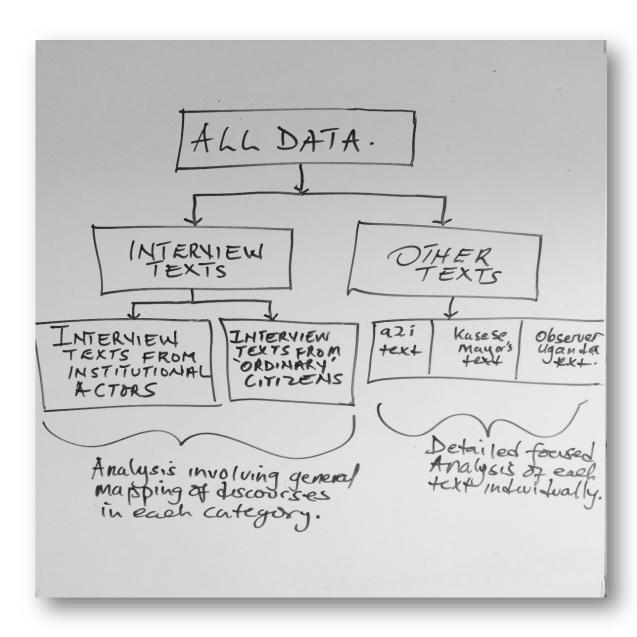
In total, I conducted eleven interviews (see appendix B). Of these, nine were conducted physically (face-to-face) with respective respondents during my field visit to Kasese district in the month of February, 2016. The remaining two (with respondents based in Denmark) were conducted via Skype. Interview material was augmented by two key articles ⁶⁵ about the initiative and another text sample extracted from Access to Innovation's documentary (see appendix E). All these add up to fourteen documents/texts as the basis for analysis.

Fairclough (2003) rightly notes that discourse analysis using CDA can be "laborious" hence "[it] can be productively applied to samples of research material rather than large bodies of text." (Ibid: 6; cf. Fairclough 1992: 230; Jorgensen & Phillips 2002: 78ff). But even with that, grey areas remain on how to effectively handpick samples from the collected data that can truly represent the overall practice. This process becomes even more daunting when, as is the case here, interview texts are the core. The choice of which way forward with the analysis, then, lies on the individual researcher/analyst which involves tailoring the analytical model to fit the aims of the research project.

⁶⁴ That is, its ability to allow the interviewer to maintain a reasonable guide during the interview process (through preidentified themes, topics, etc.) without necessarily constraining the space in which the interviewee responds.

⁶⁵One written by the Mayor of Kasese municipality in *The Guardian* Newspaper, United Kingdom, and the second one is a news article in Uganda's *The Observer* newspaper – see appendices H, I).

For effective analysis, the above data was organized as follows. Two broad categories were initially created: category one for *Interview texts* and category two for *other texts*. *Interview texts* category was further divided into two sub-categories: *Interviews texts from institutional actors* and *Interview texts from 'ordinary' citizens*. One reason for this categorization was hypothetical (and had to be proved through analysis), that is, the idea that interview texts from institutional actors within the same programme/project are likely to have a lot in common, in varying degrees representing the *mainstream* version of events. Similarly, interview texts from 'ordinary citizens' are likely to have a lot in common, in varying degrees representing *alternative* version of events.



Above: Author's visualization of the way data was categorized for analysis.

But above all, within the *Interview texts* category, part of the analytical interest was on actors' discursive representations of what poverty is, and how they think their alternative energy

activities can alleviate it. Regarding Interview texts with 'ordinary' citizens; analytical interest was mainly to capture their version of events, whether or not their talk embody different/alternative descriptions of events in relation to dominant constructions.

For the analysis to pay attention to all data (or at least most of it) as Yin (2009) recommends, hence comprehensively representing the discursive practice in question (as Fairclough (1992) emphasizes), while maintaining the possibility to work with the analytical framework described in section 4.1 above; each of the two sub-categories in *Interview texts* was analyzed as a whole – much as relevant references and textual examples, in the analysis, are made to individual interviewees within each sub-category. On the other hand, the three texts in *Other texts* category are analyzed individually and in more depth. One reason for this move concerns the sources of these texts. Given their sources; these three texts can aid the analysis with multiple dimensions to the events. The mayor's article provides us with a view of events from someone in a position of authority. The observer article in part brings in the dimension of media's representation of events and the nature of 'voices' that are counted as 'representative'. Finally, the text sample from a2i documentary complements a broader view of all these issues from the corner where most ideas about and/or actual new energy technological solutions in Kasese are emanating from.

4.4. ETHICAL CONSIDERATIONS

Any research activity is at the same time a moral activity (Kvale & Brinkmann 2009: 62). A mere fact that we (researchers, academicians) set out to intervene into lives of others raises innumerable ethical questions for researchers and the research act itself. These ethical concerns vary, from the aims and objectives of the research agenda, to the kind of knowledge such research hopes to generate but also how that knowledge features in the 'lifeworld' of the people who are its objects. In fact, this concerns the entire research process (Ibid: 63).

The point is that as researchers, we are called upon to deeply reflect upon the kind of research agendas we craft and the way we actualize them, but also our positioning in society and its implications for research (Chouliaraki & Fairclough 1999: 66). That's why in critical research, a researcher has got to cut through the empiricist mask of 'objectivity' and partake research that is directly linked to, in different ways, the struggles that people who are researched are engaged in. This implies conducting research that is "critical", in a sense that it

takes the side of the oppressed⁶⁶, the subjugated, and one that is oriented towards contributing to, or being a resource in, overcoming these social ills (Jorgensen & Phillips 2002: 77). But even this is not without issues, as sometimes the researcher, by default, might claim a higher view of reality, reality which in this case is ideological in nature (Ibid). In all ways, this research sought to answer that call of being reflective on all these issues throughout the research process.

⁶⁶Van Dijk (2001: 96) puts it more bluntly in regard to the critical nature of CDA: "CDA research combines what perhaps somewhat pompously used to be called 'solidarity with the oppressed' with an attitude of opposition and dissent against those who abuse text and talk in order to establish, confirm or legitimate their abuse of power. Unlike much other scholarship, CDA does not deny but explicitly defines and defends its own sociopolitical position. That is, CDA is biased – and proud of it."

5. ANALYSIS

Here I introduce the case study, the Kasese Champion District Initiative (CDI), and analyze it basing on the corpus of material specified in sub-section 4.4 above. In analyzing the material, I use Norman Fairclough's new CDA framework, also elaborated in sub-section 4.1 above.

5.1. DISCURSIVE CONTEXT: Kasese District and the CDI

Established in 1974⁶⁷, Kasese district is one of the 112 districts that comprise present day Uganda⁶⁸. It is located in the South-western region of the country, lying between latitudes 0° 12'S and 0° 26N and longitudes 29° 42'E and 30° 18'E. The district economic landscape is predominated by agricultural activity, augmented by mining⁶⁹, tourism⁷⁰, fishing and trade activities in town areas. The district covers a total land area of 3,389.8 square kilometers⁷¹, with a total population of 702,029 people, 75.5 per cent of whom live in rural areas. The district strives, as its vision states; "[to] have a poverty free society by 2025⁷²

Illustrative map: Locating Uganda in Africa and Kasese in Uganda



Sources: Extracted from Wikimedia (commons), Google Maps, and Pinterest. Illustratively merged by author.

⁶⁷"Established" in a sense of a "modern" political sub-unit, a district, as part of a wider national political unit, the country. Otherwise, the region has been in existence for long time.

⁶⁸Here I have not gone into further description about Uganda, where Kasese district is located mainly due to space constraints. Nevertheless, it's important, especially for those who are not so conversant with the region, to mention a few basics about Uganda. With a population of about 40 million people (2016), Uganda is located in the Eastern part of Africa, bordering South Sudan in the North, Kenya in the East, Tanzania and Rwanda in the South and The Democratic Republic of Congo to the West. For quick basics about the country, see for Example United Nations country data, available: http://data.un.org/CountryProfile.aspx?crName=uganda. See also: World Bank

⁽http://www.worldbank.org/en/country/uganda) and CIA (https://www.cia.gov/library/publications/the-world-factbook/geos/ug.html).

⁶⁹The district is home to Kilembe mines, where cobalt, Sulphur and to some extent copper is mined. Lake Katwe provides an avenue for salt mining.

⁷⁰Among other tourism avenues, the district is home to three of the country's national game parks: Queen Elizabeth National Park, Rwenzori Mountains National Park and Kibale National Park

⁷¹With 86 per cent dry land, 12 per cent water bodies and 2 per cent wetland

⁷²This and further information about the district is available on the district website: http://kasese.go.ug/?page_id=35 – see also WWF Uganda 2013: 2.

5.1.1. KASESE CLEAN ENERGY CHAMPION DISTRICT INITIATIVE

The Kasese clean energy champion district initiative (CDI) was launched in 2012 by World Wildlife Fund Uganda country office (WWF-Uganda) and 'partners' with a view of expanding 'clean energy' to the people of Kasese district and later on to other districts in Uganda. Through interventions that embody a wide array of alternative energy technologies (these include biomass-based power technologies, solar, geothermal, mini-hydropower, among others – see Guardian 2015; Leidreiter 2015); WWF-Uganda and 'partners' envisage that in expanding these energy technological solutions; 'poverty', seen to be widespread in the region and the country at large, will gradually be eradicated (RENFORUS 2015; 100% Renewables 2015). The 'renewable energy futures for UNESCO sites' (RENFORUS) describes the mission of Kasese district:

Kasese aims at becoming a model that [other municipalities and districts] will be able to adopt to eradicate poverty which is strictly related to the lack of access to energy. (RENFORUS 2015)⁷³

Two (quite inter-related) events were major antecedents to this initiative. All took place in 2012. The first was the district exercise of 'mapping and profiling the poor' (Renno et al., 2012). And the second was the district renewable energy strategy (WWF Uganda 2013).

To begin with the 'poverty profiling and mapping study'; the district, with support from the Belgian technical cooperation, finalized a study (see Renno et al., 2012) whose mission was:

[T]o identify who the poor are in Kasese, and highlight any poverty 'hotspots' either geographically, within livelihood categories or among particular population groups. (Renno et al., 2012: 15).

The study found out that up to 55.2 per cent of residents were either "moderately" or "absolutely" poor – 47.1per cent and 8.1 per cent respectively (Ibid: 8, 24). The "absolute" figure (8.1 per cent) is slightly below the western regional average (8.7 per cent) and the national average (19.7 per cent) as indicated by Uganda's National Development Plan 2015-2020⁷⁴ (see NPA 2015. cf World Bank 2016).

The district renewable energy strategy (see WWF Uganda 2013) published a year later ⁷⁵ reechoed many of the key findings of the above study. Hence, aware that many people in the

Also available: http://renforusinitiative.net/kasese-clean-energy/
 The Uganda National Development Plan 2015-2020 indicates regional disparities in the number of persons living below the "poverty line" (1.25\$ a day). The Northern region leads with the majority (43.7 per cent), followed by the Eastern region (24.5 per cent), Western (8.7 per cent) and central (4.7 per cent) (See NPA 2015: 67).

⁷⁵With funding from World Wildlife Fund-Uganda).

district live rurally (75.5 per cent) and that almost 99 per cent exclusively relied on wood⁷⁶; the district renewable energy policy sets 'rural poverty alleviation' as its key aim. By setting 2020 for 100 per cent 'clean energy access' by all district residents (way before national estimates and global 2030 targets); the district has become a center of attention locally and internationally (e.g. Kibugu 2016; Guardian 2016; Leidreiter 2015: 111f; Garcia 2015; RENFORUS 2015; Seleverio 2015: 40f; Christensen et al., 2014; Nielsen 2014; Nakkazi 2014). One commentator on *inhabitat* weblog dramatizes the 2020 vision of Kasese:

One district in Uganda is doing something incredible for its people and the environment while giving more developed countries around the world a run for their money. Mayor Godfrey Baluku Kime plans to make the Kasese district in Uganda 100-percent powered by renewables by 2020, years ahead of the goals of most other governments on the planet. (Distasio 2015).

Within almost the same period, the same funders of the renewable energy strategy (WWF-Uganda but now together with sister branches in Norway, Denmark and Sweden⁷⁷) had, already in 2012, hatched an energy initiative that would cover the entire district. This came to be known as the Kasese clean energy champion district initiative (see Christensen 2014: 1065). Together with the poverty mapping and profiling study, the renewable energy strategy in part provided the necessary discursive resources⁷⁸ needed in articulating the need for an alternative energy project which was actualized through the CDI.

The stated key aim of the initiative is to expand access to renewable energy technological solutions in Kasese, as a champion district, and later on replicate it in all other parts of the country with a view of inter alia alleviating poverty while at the same time, fighting climate change (Christensen et al., 2014; Nielsen 2014; Chifamba & Oketcho 2013).

To that end therefore, actors from within and outside Uganda have come together to realize the goals and aims of the initiative. WWF-Uganda coordinates local 'partners', while a Danish network, *Access2Innovation* (A2i) coordinates (and facilitates) the coming on board of scientists, companies, researchers, local governments, and other 'partners' in Denmark whose fields of expertise, knowledge, experience and financial resources are seen as crucial in the process (Overgaard & Nielsen 2014). Conditions that are seen as a manifestation of mass

⁷⁷ See WWF terms of reference calling for consultancy proposals on the champion district initiative. Available at: http://awsassets.wwf.no/downloads/tor-for-champion-district-partnership-study.pdf

30

 $^{^{76}}$ With all the environmental and health implications ascribed to the practice.

⁷⁸ For example deforestation rates, poverty levels, population size, uptake of 'improved' cook stoves, etc.

poverty⁷⁹ as well as the rapid environmental disasters in the district⁸⁰ and the country at large are key motivations behind the initiative.

However, conditions in Kasese cannot be treated in isolation of the national picture. Indeed, within WWF and A2i circles, the motivation behind implementing such an initiative in Uganda significantly hinges on the general portrayal of that country (in national and international statistics) as one of the low scorers on the world energy access scale (see Ibid; Gustavsson et al., 2015). Recent national energy statistics released by Uganda's National Development Authority through the second National Development Plan⁸¹ (NPA 2015. cf. MEMD 2007; 2002) captures the country's energy situation in an even dramatic way⁸². The level of per capita energy consumption is decried in the Plan:

Uganda's electricity consumption per capita is still low, estimated at only 80kWh per capita at the end of 2012, which is significantly lower than Africa's average of 578kWh per capita and the world's average of 2,472kWh per capita. This level of consumption compares poorly with countries like Kenya at 133 kWh, Ghana at 246 kWh and Zambia at 551 kWh per capita⁸³.

The plan is that by 2020⁸⁴, the total energy access would have been increased from the current 14 per cent to 30 per cent of the population (remember the ambitious 2020 100 per cent by Kasese district), and overall energy consumption from 80kWh per capita, to 578kWh per capita (Ibid: 182). Such a statistical environment and the kind of language used in describing these statistics locally and internationally not only describe the reality (neutrally); statistics, in an important way, act to rationalize intentions of those who seek to intervene in different situations 'to remedy' what is characterized as needing such remedies. Again and again, these statistics are reproduced by international agencies⁸⁵, interveners and manifold do-gooders of different kinds to cement their actions in what appears to be "mere facts on the ground".

⁷⁹Profoundly described in the district poverty profiling report (Renno et al., 2012)

 $^{^{80}}$ Which are also linked to poverty – the poor rely on traditional biomass for cooking using traditional methods that are detrimental to the environment, hence deforestation etc.

⁸¹Which is stated to run between 2015-2020 with a theme of "[s]trengthening Uganda's Competitiveness for Sustainable Wealth Creation, Employment and Inclusive Growth".

⁸²The country's energy mix is recorded at 92 per cent biomass, 7 per cent fossil fuels and 1 per cent electricity. The overall access to electricity is recorded to have been 'very low' at 14 per cent and rural access to electricity at 7 per cent (NPA 2015: 24).

⁸³NDP (2015: 24)

⁸⁴According to the plan, it is envisioned that by 2020, the country will be "transformed" from its currently "peasant", "backward", "agricultural" economy to a "middle income" country. See the NPA (2015: viif) – "Foreword" by Yoweri Kaguta Museveni, President of Uganda. All these plans are part of the country's broader "vision 2040" (NPA 2013. Available: http://npa.ug/uganda-vision-2040/). (cf. Banjwa 2016, of visionless visions and the need to transcend tantalizing myths. Available: http://www.observer.ug/viewpoint/46158-of-visionless-visions-and-the-need-to-transcend-tantalizing-myths)

⁸⁵ Agencies which, in many cases, aid the production of these statistics locally. For instance; Uganda National Development Plan (2015-2020) was inter alia funded by the World Bank, the "United Nations family" and international organizations like German's GIZ (see NPA 2015: xix).

Since June 2012, CDI has mainly capitalized on two key aspects of energy use in Kasese; cooking and lighting ⁸⁶ (WWF Uganda 2013). To these, an array of actors ⁸⁷ has been mobilized from both local and international contexts to form a 'partnership' that will ensure the fulfillment of the objectives of the initiative (Christensen et al., 2014).

For all the purposes and intents of this study; it convinced me beyond doubt that this site⁸⁸, with all its characteristics⁸⁹, could provide a strong and sound case for my analysis of the *alternative energy-poverty discourse* within a context of wider sustainable Development practices.

5.2. SO, WHAT EXACTLY IS THE PROBLEM?

As I have earlier indicated; Norman Fairclough's version of CDA is problem oriented. For its part, CDA seeks to address problems that arise from unequal discursive relations in society (see section 4.1 above). Much as, in the previous sections, I have endeavored to raise signposts to what I consider to be at stake in this whole debate about alternative energy and poverty; it is vital to repeat myself here with more clarity. What is wrong with the alternative energy-poverty discourse in the context of Uganda and Kasese district in particular? I claim the problem is twofold, lying on two interrelated levels.

At a higher level, the problem is ideological, that is, it lies in the way the alternative energy-poverty discourse ideologically reinforces the Development agenda ⁹⁰ in countries of the global South like Uganda in this case. An analysis of how, for instance, institutional actors on the energy project in Kasese understood what "poverty" is (and how their alternative energy practices can alleviate it) clearly highlights this issue: old narratives articulated in new ways (see sub-section 5.3.3. below).

At a lower level, we can identify a series of problems that arise in the discursive operations of this discourse to achieve its ideological goals. All of a sudden, old Development problematics

like. Solar panels, on the other hand, are to replace the 'environmentally unsound' and 'healthily damaging' kerosene lamps (locally known as 'tadooba') as well as diesel generators. One iconic feature of this intermingling of actors from diverse geographical spaces is the establishment of the Kayanja mini-grid solar hub at Kayanja village on Lake Edward (see appendices C and D), which I also managed to visit in February, 2016 and interacted with citizens in the area.

⁸⁹Mainly considering the nature of actors involved and the kind of objectives and ambitions being pursued.

⁸⁶ 86 The main alternative energy for cooking being promoted is 'energy saving' cook stoves, while the key alternative for lighting is solar photovoltaic 'Energy-saving' cook stoves are offered both as an alternative to the 'inefficient' 'traditional' three-stone stove as well as an efficient also cost-effective alternative to cooking in institutions like schools, hospitals and the

⁸⁷Locally, the list of these 'partners' includes WWF-Uganda, Kasese district local government, Kasese municipality, joint energy and environmental programme Uganda (JEEP), Barefoot power Uganda limited, Rwenzururu Kingdom, as well as a number of local groups and associations. These are joined by 'international partners' like WWF (Sweden, Norway and Denmark), remegy energy, systems teknik, energy city frederikshavn, students and researchers from Alborg University among others all coordinated by A2i.

⁸⁸Kasese district, and the Kasese district clean energy initiative in particular.

 $^{^{90}}$ Now metamorphosing as "sustainable Development" in the second internationalized Development agenda I referred to earlier.

like relying on major assumptions of "modernization" and related theories (which were dominant until the 1960s), their dualisms like "traditional" and "modern" ("modern" is good, "traditional" is bad and has to be eliminated), third-world 'catch-up' sentiments⁹¹, are all now freely advanced within the alternative energy-poverty discourse. We can also trace new actors, new identities, new ways of using language, visions of power and whole problematic ways of representing people in new 'third-world' sites like Kasese district in Uganda.

For instance, as the subsequent analyses demonstrate: 'the poor' are constructed mainly as 'villains' ⁹² as opposed to 'victims' ⁹³ of local and global operations power and capital that are wrecking the planet; the general treatment of 'poverty' as ahistorical and delinked from webs of wealth and power; the construction of 'the poor' as 'energy consumers/customers' as opposed to 'citizens' with rights to unrestrictedly access common/public goods and services and so on. These problems have to be addressed, and since they are in part to do with discourse; carrying out a 'critical discourse analysis' is a right step in a right direction.

5.3. OBSTACLES TO THE PROBLEM

Having stated the problem, the analysis now turns to the 'obstacles' to solving the problem. These obstacles are located at three inter-related levels: the conjuncture (the network of practices linked to the discourse in focus); the way discourse features in a social practice and in the discourse moment itself.

5.3.1. ANALYSIS OF THE CONJUNCTURE

The task here is to locate the practice within the network of practices it is entangled into (Fairclough 2001: 125f; Chouliaraki & Fairclough 1999: 61). One precise way to do this it to have a sense of how the discourse aligns, in real time, the circumstances and conditions of production and consumption (Chouliaraki & Fairclough 1999: 63). Since all texts analyzed here in part relates to a specific renewable energy program/project in Kasese district, the CDI; this will serve as the entry point into the practices involved in the context of Kasese district. And since the project brings together different actors from different social fields (business, education, energy, government, and so on); it is located within a complex network of practices that constitute civil society organizations, (local) government, the business sector and companies, as well as education institutions. On the other hand, we can also locate the

_

⁹¹Though now with a pre-caution: do not use our old energy system; it is dangerous to life on earth!

⁹²Their energy practices contribute to climate change and this worsens their poverty – see also Chapter one of this work.

⁹³Unless such victim-hood is also as a result for their own 'ignorance'.

practice within the domain of sustainable Development, which is yet another complex network of practices that include practices from the field of economics, environment, and numerous institutions like the United Nations, governments, civil society organizations, multilateral companies among others.

Fairclough notes that the nature of practices articulated together is itself a question of power and struggles over power regarding which practices to include or exclude. Issues to do with power and struggles over it connect to issues of ideology and how it cements particular practices within a particular conjuncture (see Chouliaraki & Fairclough 1999: 61ff). The location of the discourse within such a complex network of practices poses serious obstacles to solving the problem already identified (Ibid; Fairclough 2001).

5.3.2. ANALYSIS OF THE PRACTICE

Analysis of the practice regards to the nature of role played by discourse in the social practice in question. Chouliaraki & Fairclough (1999) identify four ⁹⁴ 'moments' of a practice: 'material activities', "mental phenomena", "social relations and processes" as well as "discourse" (Chouliaraki & Fairclough 1999: 61. cf. Fairclough 2001: 1). These are dialectically articulated together within a social practice, with each internalizing the other without being reducible to them. In the case of Kasese and the CDI generally, discourse attempts to represent the whole practice mainly through 'internalizing' (see Chouliaraki & Fairclough 1999: 21) other aspects of the practice (like activities, mental phenomena and social relations).

For instance, discourse forms a core part actors' activities like "community awareness campaigns". During these campaigns, discourse on new forms of energy and poverty are "rhetorically deployed" (see Fairclough 2001) in communities who get to learn more about the functionalities, uses, pricing and financial mechanisms available for them to acquire these technologies. Coupled with other activites like radio talk shows, interviews, reports and studies samong others; locals also learn about the 'dangers' of holding onto their energy alternatives like the three stone stove, as well as the 'opportunities' that new technologies horing once one embraces them. In other cases, discourse seeks represent cultural values and beliefs of locals regarding energy use. Again as the analysis of the discourse moment below shows in some texts; there is an ongoing discursive contest here as some citizens seek to re-

⁹⁴ After incorporating those developed by Harvey (1996).

⁹⁵ Like Gustavsson et al., (2015) and WWF Uganda (2013).

⁹⁶ Like "saving money while saving nature for the future".

articulate their cultural beliefs and values regarding energy use⁹⁷. But also, as we shall see in the case of Kasese mayor's article and others, discourse internalizes aspects of power, social relations and identities. So, discourse plays a central part here, and much of this has to do with the discursive representation of the practice.

5.3.3. ANALYSIS OF THE DISCOURSE MOMENT

This core part in CDA encompasses two aspects: 'structural' and 'interactional' analyses. I will go about these two aspects in each of the following texts individually. Part of what constitutes a major obstacle to solving the problem here relates to how some discourses or a particular discourse come to dominate (or, as one may say, colonize) the order of discourse of a particular practice or domain and how particular forms of speech or language use come to dominate interactions (Fairclough 2001; Chouliaraki & Fairclough 1999).

Three texts will be analyzed here. For the first two texts ⁹⁸, I follow the same order (the discourse types drawn upon by the text and linguistic features – mainly concentrating on two linguistic tools particularly useful in the context of this study: "transitivity" and "modality" and "modality" and "modality". In the third text ¹⁰⁰, I focus the analysis on one important dimension of 'intertextuality', that is, "discourse representation" (See Fairclough 1992). Here I am interested in tracing the representation of events in local media. The last part of the analysis consists of general observations on discursive representations on poverty and how alternative energy technologies can help alleviate it, representations by interviewees in the data category: *interview texts from institutional actors*. This is also in part responsive to sub-questions one and three set out in the introduction of this work.

TEXT ONE: KASESE MAYOR'S ARTICLE, GUARDIAN NEWSPAPER, UK

The article is produced by the Guardian newspaper, United Kingdom, under one of its 'networks', one may call them 'categories', 'the global development professionals' network', under the sub-category of 'energy access'. The category of 'global development professionals' network' is generously funded by among other 'sponsors', the Bill and Melinda Gates foundation¹⁰¹. That gives a hint on the conditions under which this particular text was

⁹⁷Like in the case of the three-stone stove.

⁹⁸See appendices E, F.

⁹⁹ Modality' is specifically useful in ascertaining the role of discourse in the constitution of social relations as well of the manner in which representations of reality are controlled. It also has implications for the social construction of knowledge and meaning systems. On the other hand, 'transitivity' helps in ascertaining the ideological implications of particular forms of speech and language use (see Fairclough 1992: 235f; Jorgensen & Phillips 2002: 84). Both dimensions are particularly important to the study.

¹⁰⁰See appendix G.

 $^{{}^{101}}See: \underline{https://www.theguardian.com/global-development-professionals-network/2012/nov/27/guardian-global-development-professional-network}$

produced and who the target 'consumers' are, that is, those readers of the newspaper who work within the 'field of Development'.

The structure of the article ¹⁰² seems to follow a standard structure of 'opinion articles': title, summary of content, name of author, date and time, main text and author details at the end of the article. Yet, on a closer look, this is no ordinary opinion article. First, the reporting style embodied in the article's title – "Ugandan mayor: my district will be 100% renewable energy by 2020" – is akin to that common in 'news articles', where the newspaper reporter "reports" on any particular social event or subject. The same applies to the summary of the article's content, which again is not directly extracted from the main text as usually the case is in most opinion articles, but is the opinion editors' 'representation' or 'summary' of what is in the main text. Second, what we also see in this text is not an individual trying to express an opinion on a subject matter, as again is the case in many opinion articles. The mayor, as a powerful individual in Kasese, is writing with power and tries, though with an observable difficulty ¹⁰³, to express authority regarding social events he is deliberating upon.

The article articulates together different discourses, genres and styles. These discourses are selectively drawn mainly from three orders of discourse: that of (local) government, the media as well as from the domain of (sustainable) Development.

It begins by combining elements from an environmental discourse, alternative/renewable energy discourse as well as discourse on cultural identity. This happens in the first three sentences of paragraph one hence:

"My desire to set 100% renewable by 2020 goal was strongly motivated by the alarming climate-induced degradation of snow-caped Rwenzori Mountains, from which our people derive their livelihood, water supply and identity. The people of the Rwenzori get their name from the snow. Without the snow, our name will be no more." (Italics added.)

The text also embodies a 'modernization discourse' (for instance, paragraphs 5-8 generally mark a transition from "traditional" and "backward" state of energy to a "modern" form); discourse types on partnership (for example sentences 4 and 5 of paragraph 3); the neo-liberal

¹⁰²For the article, see appendix E.

¹⁰³The mayor, as a political leader, struggles to demonstrate authority over events but at the same time cannot hide his and the district council's helplessness in the face of new energy companies and businesses. Even the council's basic right to collect taxes from profit-making companies and businesses is lost in the process (see sentence two of paragraph three: "The district council has passed a policy providing tax breaks for all renewable energy-related businesses." In another text, that of the Observer newspaper Uganda, the manager of WWF, a key actor in the Kasese Champion District Initiative, is reported as recommending districts to "offer tax exemptions for solar dealers..." which gives an impression of the relationship between the council's resolution and the practices of organizations like WWF and others leading the renewable energy campaign in the district.

economic discourse (as evident in paragraph 2, 3, 7 and 8); the needs discourse (for example sentence 2 of paragraph 2 and sentence 3 of paragraph 5); the aid discourse (paragraph 9) as well as aspects of the poverty discourse (paragraphs 9-10). The text generally employs a reporting genre common in most government and local government practices (for instance, a government top official reports as if s/he does everything by him/herself). It also employs an advertisement genre (for example the first sentence of paragraph nine – "we need sustainable funding for renewable energy technologies." – appeals to those capable of providing such funding) and a propagandist style – again common to government political characters (this is more evident in paragraph 10). These discourse types are selectively drawn from mainly three orders of discourse: that of (local) government, the media as well as the domain of (sustainable) Development.

The mayor's text is quite 'heterogeneous' (see Fairclough 1992: 104) in terms of discourse types drawn upon. However, the text is also also manipulative in that during the articulatory process, discourse types drawn from other orders of discourse are applied in a manner that lends coherence to the key discourse in the text, which I have termed the alternative energy-poverty discourse in this study – drawn from the order of discourse of the domain of sustainable Development. Again, a perfect example is in paragraph one where the environmental discourse and discourse on cultural identity are all used in a manner that approves of the need for the energy project and new energy technologies in the district.

The above discourse types are activated linguistically in various ways. For instance, the mayor begins the article by writing in first person, connecting events to himself in terms of causality and responsibility ("My desire to...", "...I want to boost energy access...", "I want to bring energy access..." and so on). This gives an impression that perhaps renewable energy activities in Kasese are a result of the mayor's own volition. This 'active voice' is however short-lived. From paragraph two, a 'passive' tone sets in: "The 100% renewables programme was launched..." does not say who launched it. The launch is portrayed as 'agentless'. The same applies to the last sentence in paragraph five, where "the deployment of relatively cheap domestic solar systems is providing electricity for many of the poor..." is presented as if the implied solar systems were dropping from the heavens like the biblical *Manna*. "Wording' (Fairclough 1992: 236f) and choice of vocabulary categories here also makes a big difference. Consider a scenario where, for instance, instead of that military metaphor, "deploying", alternatives like "selling" or "loaning" were used. The result would be different and the ambiguity would have been at least minimized. In paragraph 6, the mayor also claim that new technologies "are improving community relations" as "[c]onflicts as a result of groups

searching for firewood have reduced, while time to collect firewood is being used for other, more productive work". But can community relations be better when a handful can afford – and possess – solar panels and other devices while majority cannot?¹⁰⁴ Also, the first of the two motivations said to have led the mayor to act, that of "the alarming climate-induced degradation of the snowcapped Rwenzori…", is initially portrayed as simply happening, that is, without agents. However, in paragraph five, one starts to get an impression that perhaps the locals, the poor people of the district, are to blame for this catastrophe¹⁰⁵. Paragraph 3 marks a dramatic shift from the mayor as the driver of events, to other actors: "the council", "We", "WWF and Bare foot power" and others.

The text is also composed of a considerably high degree of "modality" (Jorgensen & Phillips 2002: 83f; Fairclough 1992), especially in much of paragraphs one, two, and three. In most of these instances, statistic figures, entirely presented as absolute "truths" and with no intertextual linkages to external sources, provides qualification for the high degree of affinity the mayor accords to his utterances. (For example in the second paragraph where the mayor writes "[o]only 7.6% of the 134,000 households in the district have access to the nation's electricity grid…".) Similar examples can be cited in subsequent paragraphs throughout the text.

TEXT TWO: EXTRACT FROM ACCESS TO INNOVATION DOCUMENTARY.

This text is a transcribed part of a documentary¹⁰⁶ by 'Brodersen Kommunikation' for 'access to innovation' (a2i)¹⁰⁷. This text was specifically chosen for analysis because it also captures a perspective we rarely get in other texts: the wider perspective, of the regional and continental plans of same or related actors in Kasese.

_

¹⁰⁴ These two variables used by the mayor (a community/public forest and a solar panel or any other new energy technology) differ so sharply in terms of their effect on existing social relations. A public or community forest is in practice accessible to all community members, while a solar panel or a biogas digester is a private technology accessible with money or willingness to be indebted to whoever is selling it.

¹⁰⁵When the mayor describes of the past social life of the people regarding energy access and use, that is, the fact that 97% of the residents relied on "charcoal and firewood" for cooking and 85% relying on "kerosene for indoor lighting"; he seems to be suggesting that his people were the cause of the problem, the problem of climate change, which motivated him to act. Hence he celebrates the fact that out of his actions; "[s]olar for lighting and biogas for cooking has replaced the traditional three-stone method of cooking – reducing indoor pollution" (see sentence three of paragraph five). This way, the mayor imagines of Kasese as a closed social space, in which inhabitants have committed some grave atrocities in nature that have come to negatively impact their life and they have to act to reverse this phenomenon – and the way to act is by reaching out to the outside world, a world that has nothing to do with the local misery, and purchase solar panels and other energy technologies to fix the problem once and for all. Is not this the common approach ever since the poor moved from being viewed as "victims" to being mercilessly held accountable as "villains" regarding the degradation of nature by "human activities"? (see Sachs 2010. cf. chapter one).

¹⁰⁶The full documentary is available at a2i YouTube channel: https://www.youtube.com/watch?v=ilHrQuoaA8U.)

¹⁰⁷For the text, see appendix G). For emphasis' sake, a2i is one of the key actors in the Kasese Champion District Initiative (see section 5.1.1 above).

One of the challenges, with documentaries (and communicative events of this nature) is that the speech of the same respondent/interviewee can be spread across the film/video, and the same trend appears after transcription. This poses its own problems if the text were to be analyzed as it is. But given the fact that in this case, names of persons are indicated at each of their 'speech turn', I re-organized the transcript to put words of the same speaker under his/her name. The part reproduced for analysis is the speech of the 'narrator', which takes over half of the transcribed text.

The text majorly articulates together discourse types from one order of discourse which we can roughly call that of the business sector (with neo-liberal economics undertones). For instance, in paragraph one, the region, East Africa, is referred to as a "commercial market" which is "fast growing"; while in paragraph seven, East Africa is regarded as an "energy market" that is "ready and waiting for Danish Green Techs" of diverse sorts. No wonder the title of the documentary is "green energy business in East Africa" and the summary of the film "a [s]hort film describing the potentials for Danish green tech companies who are interested in doing business in East Africa." People, citizens of rural Africa, are, in paragraph five, referred to as "consumers" who are hard to "access" without companies' prior "knowledge of the local network."

The text draws from discourse types from other orders of discourse, which are articulated in a purely 'business-friendly' ¹⁰⁸ language. For instance, in paragraph one; there is a mixing of discourse types from the order of discourse of the environment, sustainable development, as well as the business sector in such a way that the depicted "environmental hazard" resulting from "heavily polluting energy" "stunts [economic] growth" and the panacea lies in 'renewable energy as business' which will restore a "booming economy". What is postulated as being at issue through this intermingling of discourse types is not the "polluting energy supply" or the general "environmental hazard" resulting therefrom; rather, it is the [economic] growth that has been "stunted" by the duo.

Other discourse types include the 'advertisement genre' from the order of discourse of the media. For example; in paragraph three, Danish green techs are said to be "on the verge of making it big in East Africa". Despite the ambiguity 109; the sentence is rather appealing to

¹⁰⁸In the neo-liberal sense of the phrase.

¹⁰⁹"On verge" can mean anything from "may" which connotes uncertainty to "will" in a sense that a possibility is in the offing. "On verge of making it big" is a lifeworld phrase for "about to succeed" and in this case the phrase carries 'profit' connotations.

other green techs from the "frosty Scandinavia" to join a promising market. Also, paragraph five talks about one of the "partners" in the energy project of Kasese, a2i, and goes ahead to advertise what a2i is and does. The entire final paragraph is exclusively dedicated to a particularly persuasive and informative kind of advertisement regarding the "ready energy market" in East Africa and how Danish green techs can seize the moment and penetrate it 110.

The above dominance of discourse types from the business order of discourse can also be traced down from the linguistic features of the text itself. One vividly present feature is a "coherent vocabulary" (Fairclough 1992: 234f). Words and phrases like "commercial market", "growth rates", "stunting growth", "booming economy", "demand", "supply", "business model", "doubling production", "immediate profits", "access to consumers", "knowledge of the local network", "financial structures", "commercially viable", "creating jobs", "energy market", "market approach" and the like are all from, or used in relation to, the business world. They are not so distant from those in the "planetary vulgate" of Bourdieu & Wacquant (2001). Throughout the text, the speaker expresses (an objectively) high degree of affinity to the statements he makes, constructing such statements as "truths", and constituting subjects involved in particular ways. For instance, the construction of sentences throughout the text with a 'simple present tense' (for example "East Africa is among the growing commercial markets today..." in paragraph one; "Danish companies are world famous for..." in paragraph two and "The energy market in East Africa is ready and waiting for Danish green techs..." in paragraph seven) is an objective expression of a high degree of affinity to the statements made (see Fairclough 1992: 159). In such instances, the utterances are constructed as incontrovertible "truths" and subjects are ideologically positioned as such.

TEXT THREE: ARTICLE BY THE OBSERVER NEWSPAPER, UGANDA

In this article¹¹¹, interest generally lies in finding out the manner in which the discourse is represented in the (local) media, what is referred to as "discourse representation" in Fairclough's terminology (see Fairclough 1992). Discourse representation is a mode of intertextuality of a text, in which fragments of other texts are 'reported' in a text. The reported

_

¹¹⁰In a similar context, one of the respondents in the documentary, the *Team leader, Business counsellor, Danish Embassy Nairobi (Kenya)*, adds: "The match of the Danish campanies' knowledge in the energy sector to the Kenyan needs is right. That's why Danish companies should move now." And, "I would say the timing is right, because of the readiness of the country [Kenya] to welcome foreign investors, and foreign suppliers of technology, and also for very encouraging policy to welcome new solutions in the country's energy provision. And a lot of investments are already being made...[s]o, if we want to be part of that, we should move now."

¹¹¹Reproduced at the end, see appendix F.

or 'represented' text is either marked manifestly¹¹² or indirectly¹¹³. But Fairclough contends that discourse representation can also be done in complex and less clear-cut ways, for example where the represented text or voice is embedded in the reporting text/voice, and where the reported voice is translated into the terms of the reporting text/voice (see Fairclough 2003: 39ff; 1992: 272ff; 1992:105ff).

Structurally, the 'news article' ¹¹⁴ begins with a story from a lifeworld of a local chairperson, ironically depicted as a typical "low end" or "low income" villager, and how "acquisition" (not "buying" or "acquiring on credit") of solar light devices transformed what is represented as his 'dream' into a reality. This story is then connected to the public life of people in Kasese district. This happens in paragraph ten: "[t]the Kinangas illustrate a model which is spreading in Kasese." This is followed by a series of objectively stated "facts" about the energy situation in Kasese and Uganda in general. These "facts" are qualified through a manifest intertextual chain – "independent research...found...", "...advocates emphasize...", "According to W.H.O...", and so on. This is then linked to a specific initiative in Kasese, the Kasese champion district initiative ¹¹⁵.

The reportage follows standard reporting style on renewable energies I find common in renewable energy organizations and companies – a narration of how ordeal under some "traditional" energy form has been powerfully overcome by a new one, "modern" in nature, and how that has resulted into a "transformation" of life for the better. It employs a mix of direct (like quotation marks) and indirect reporting tools, but the text is also composed of features characteristic of what Norman Fairclough calls "double voice" – an ambivalent voice where it is unclear whose voice it is (Fairclough 1992: 107f). For instance, in the beginning of the text, you are never sure if the chairperson actually said "I only dreamt of sleeping under a well-lit roof". Nowhere in the text is it indicated directly or otherwise that the chairperson actually said so. The question then is; whose voice is this? The same ambivalence of voice is manifest in paragraphs 2, 5, 6, and 8. In some instances, the represented voice is in sharp contradiction with the representing voice. For instance, in paragraph 3, the chairperson's "lifestyle" is reported as "completely transformed". The next quotation from the chairperson (paragraph 4 – supposedly a qualification of the earlier reportage), only speaks of children's school performance and phone charging. Beyond doubt whether this actually constitutes what a "completely transformed" life is; there is reason to question the point in over exaggeration.

¹¹² For example using tools like citations or quotation marks.

¹¹³ Using different reporting clauses.

¹¹⁴Submitted by one of the newspaper's journalists.

¹¹⁵From which the article's title: "Kasese takes lead on clean energy campaign", is presumably derived.

One of the questions that arise in 'discourse representation' is how the media chooses what is newsworthy, how to represent it, and which voices count as "representative" to the event. Here we are faced with a series of problems. For instance, the pick of the chairperson – usually a person of 'high class' on the village – to act as a 'typical villager' raises serious concerns. The question here regards to whether every person on the village speak the language of the Chairperson regarding new forms of energy.

In some cases, wording conceals important information about what actually happens when alternative energy companies meet citizens. For instance, in paragraph 3 and 10, the choice of the word "acquired" can easily create an impression that the implied solar systems are simply acquired or offered (for free) by whoever is not mentioned. Yet, this would have been different suppose a more direct wording was chosen, for instance using words like "bought" or "acquired on credit". In other cases, events are represented as if they were immanent without active agents. For instance in paragraph 10, the district energy model is said to be "spreading" – a metaphor akin to the natural spread of epidemics.

Above I noted how discourse representation raises questions on how the media represents events, and the voices that count as representative. What I find in this text is particularly striking. Apart from the voice of the chairperson whose depiction as an ordinary person raises serious concerns; much of the article is manifestly linked intertextually to other texts from key actors on the energy project in Kasese whose voices and statements are represented as 'facts' which have to be taken as they are. If voices of the powerful 116 are the ones amplified in mainstream media, in various organizations and companies' reports, in different academic works and so on 117; the result is a manipulative (and ideologically concealed) constitution of powerful voices as if they were voices of common people. When this happens, the media, instead of justly representing events 118 become a mouthpiece of the powerful. In so doing, it (the media) ends up facilitating unequal power and social relations in society "and contributing, to the most part, to social control and reproduction." (Fairclough 1992: 161).

¹¹⁶Like that of the chairperson and other powerful players on the energy project in Kasese

¹¹⁷For instance regarding new energy forms and how they can alleviate poverty.

¹¹⁸Representing events in a manner that allows everyone's voice to be heard, or have a chance of being heard – particularly voices of the weak, "the losers" as we might call them.

DISCOURSES ON POVERTY AND ALTERNATIVE ENERGY BY INSTITUTIONAL ACTORS IN KASESE

Here I analyze a body of texts from the interviews with the different institutional actors ¹¹⁹ on the CDI. My goal here is to shade light on the kind of discourses the different actors draw upon to articulate the need for alternative energy practices in Kasese. Two questions form the basis for this analysis. One, how do the different actors understand poverty, a 'problem' they hope to solve through renewable energy technologies? Secondly, after knowing what the problem is, we need to look into how precisely such methods used can solve the 'problem' at hand. As a discourse analytical project, the key interest of this study relates to the kind of discourses these actors draw upon in responding to these two questions – what poverty is and how their practices can solve it.

WHAT POVERTY? ACTORS' DISCOURSES ON POVERTY

Most of the actors interviewed based their descriptions of poverty on what we can call, after Illich (2010), the 'needs discourse'. As table 01 (see appendix H) indicates, the phrase "basic needs" accompanied, in one way or another, most of the actors' conceptions of what poverty entails. Just as examples, Int.01 (see appendix B for the list of interviewees) thinks of poverty as "somebody being able to afford the basic necessities..." Int.11 contends that "poverty...has to do with having those basic needs addressed." For Int.02, the poor are those "who cannot afford the basic needs". But as will be discussed later (see sub-section 5.6), numerous questions arise when speakers invoke the notion of "basic needs". What constitutes these "basic needs"? Can we have a truly 'one-size-fits-all' and who is qualified to know what others 'need' (Illich 2010; Rahnema 2010).

In talking about 'needs', most respondents I interviewed cited things like food (and 'balanced diet'), water, energy, schooling, other forms of infrastructure and so on. To them, lack of access to these in 'appropriate' quantities constitutes what poverty is. To that end, they view their energy activities as centrally aiding the attainment of "basic needs" by the people of Kasese to escape 'poverty' and 'develop' since, as one of them (Int.01) indicated; "energy is more of a driver of development".

 $^{^{119}}$ By this I mean actors from the different institutions working on the initiative, from companies to organizations and so on.

Other actors ¹²⁰ defined poverty from an economic perspective, drawing heavily on the (neo-liberal) economic discourse. Hence Int.10 believes rural people "are not 'poor'". They are simply "low income earners". In the same way, Int.02 thinks that being able "to invest" is a key indicator of whether or not one is poor. The poor, he says, are "people who cannot be able to invest".

A number of them derived their conceptions from what we can roughly call 'the livelihood discourse'. Int.07 sums up his view: "we understand poverty in a way of resources and livelihoods. It is limitations in access to services and quality of life of people" and the fight to eradicate poverty is "empowering the people to get the necessary skills to get out of a bad situation to a better one." Elements of what I have called the PES (payments for environmental services – see chapter one) discourse can also be observed in utterances of some actors. Table 01 (see appendix H) summarizes these discourses and corresponding utterances of different actors interviewed regarding the question of poverty.

SAVE MONEY, SAVE THE ENVIRONMENT: ACTORS' DISCOURSES ON HOW ALTERNATIVE ENERGIES CAN ALLEVIATE POVERTY

From the question of what constitutes poverty, our attention now turns to inquiring how different actors on the energy project in Kasese think their activities can alleviate poverty.

Here, I find that most of my respondents understood the link in purely economic terms. They are all optimistic about the idea that their activities will in one way or another alleviate one form of poverty or another. But that has to be connected to the economic uses of the new energy forms.

Hence, as part of the dominant neo-liberal economic discourse drawn upon by many actors regarding how alternative energies can alleviate poverty; a common thread that cuts through most of interviewees utterances in this regards can be summed up in four words: *save money, save the environment*¹²¹. Examples are numerous in interviews. For instance, Int.07 sums up this view while telling me about the energy project:

-

¹²⁰Especially companies whose role in the project is to supply (put more directly, to sell) forms of renewable energy solutions they trade in.

¹²¹ It goes like this: people spend a lot of money on polluting fuels (firewood and kerosene) and many of them directly cut down trees to be used for cooking and other energy-related purposes and in so doing, they spend a lot of money while destroying the natural environment which worsens their poverty. Adherents of the new energy forms use this as a discursive tool to convince people that the new technologies, usually depicted as simple tools whose functionality depends on the user, possess elements of what I earlier called the "dual mandate". One saves money – which in part drives him/her out of (economic) poverty – and at the same time saves the environment.

The goal is to have 100% clean energy access. That we reduce pollution, our *people save* money, they save the environment, because they will not be cutting as many trees as they are cutting now. (Italics mine).

In discourses of many of these actors, the idea of "saving" 122 is indeed a core aspect regarding their renewable energy products and poverty alleviation. For example, Int.01 spells out four dimensions of "saving" that are important in his view: "time", "firewood", "income" and "trees" hence: "So, in ensuring that you have renewable energy...you have saved the *time*...[y]ou have saved the amount of *firewood*... [y]ou have also saved the *little income*... [a]nd ...you have saved the number of *trees*..." (Italics mine. cf. statements by Int.09 in the table 02 on Appendix H). Other dimensions of the economic discourse include engaging in renewable energy business activities (see for example Int.10: "our stove gives them a chance to involve into business" – see also statements by Int.11), empowering women to make (and sell) parts of energy-saving cook stoves (see for example Int.01; Int.10) among others.

Also widely visible is what I called the 'livelihood discourse'. Here, proponents believe, new energies are to solve the question of poverty by improving peoples' 'livelihoods'. "If the household is able to access clean cooking and clean lighting", notes Int.01; "then we believe that that particular person, his or her livelihood is going to be improved."

Other discourses drawn upon include the medical discourse¹²³; the gender discourse¹²⁴; the educational discourse¹²⁵ among others. Table 02 (see Appendix H) summarizes the discourses drawn upon by actors interviewed regarding how alternative energies can alleviate poverty.

5.4. FUNCTION OF THE PROBLEM

The preceding analysis was mainly a negative critique, stipulating a series of obstacles to the solution of the problem in question – the "what is" of the problem. Now we start to transition to the "ought" to be of the problem, to a positive critique (see Fairclough 2001: 126, 134; Chouliaraki & Fairclough 1999: 65). The question here is whether the social practice needs the problem for self-sustenance.

From the analysis of the moment of discourse above, we have seen how, for instance, most actors on the energy project in Kasese believe that the mechanism through which their

¹²²As a positive outcome of new energy forms.

¹²³Alternative energies can save peoples' lives put at risk by respiratory diseases inherent in "traditional" energy uses.

¹²⁴Women and girls trapped in patriarchal gender relations – relations that dictates who is responsible for fetching firewood and cooking food in smoke-stack kitchens can be liberated through replacing firewood and the three-stone model with "modern" energy forms.

¹²⁵Through training, residents can learn how to work with renewable energies as business – whether engaging in phone-charging, marketing, etc.

alternative energy practices will alleviate poverty is through encouraging the poor to look at these new energy forms with an economic lens¹²⁶. This conception is true of texts I analyzed in detail as well as a number of interviews. We have also seen the predominance of the notion of "lack" in actors' conception of what poverty is through their versions of the notion "basic needs" – the poor lack, in terms of "basic needs", what the rich presumably have. Is not this exactly how the ideology of Development, now transmogrifying into 'sustainable Development', works? In both instances above, now with the mediation of alternative energies, "the poor" are both *condemned* and given *hope* at the same time ¹²⁷. This manipulative hope is what Gilbert Rist (2008) signals when he insists that the Development discourse's strength "comes of its power to seduce" but also "to turn away from the truth, to deceive" (see Rist 2008: 1).

From the above therefore, we can assert that within (sustainable) Development practices, alternative energy discourse on poverty is functioning ideologically to reinforce Development practices in areas like Kasese. In some cases, the effects of this ideological operation are perverse. Profit-making renewable energy companies, now seen as "saviors" (in the local fight to end "self-inflicted" poverty and environmental degradation), get, with no difficulty, what they need to accumulate as they wish: free public land, tax-free environment and the like. The practice generates all these problems as they are necessary for it to maintain hold in these areas.

5.5. POSSIBLE WAYS PAST OBSTACLES

Having identified the obstacles through the analysis of the conjuncture, the practice and the discourse moment; the question now shifts to how these obstacles can be eradicated. We can approach this question by identifying major contradictions in the practice itself, but we can also identify alternatives to the dominant constructions (see Fairclough 2001: 126, 134; Chouliaraki & Fairclough 1999: 65). I will do both here. I first briefly highlight some of the major contradictions in the practice and then present the version of events through the eyes of some of the 'ordinary' citizens I interacted with during the study visit to Kasese¹²⁸.

¹²⁶Either they turn into solar panel vendors, cook stove makers, starting up businesses that depend on energy from these technologies and so on.

¹²⁷The attitude against the poor in this instance sounds like this: you know you're responsible for your poverty but hey, this solar panel may work for you if you buy it.

¹²⁸This, of course, is not to suggest that views of citizens are a transparent representation of 'reality' around energy and poverty in Kasese (citizens' views are indeed, as well, particular discursive formations on the subject that construct particular perspectives on it); but rather to emphasize their agency and the potentials for change.

CONTRADICTIONS

In the texts analyzed in section 5.3.3 above, a number of contradictions can be highlighted. For instance, it is a contradiction in the text of the mayor of Kasese to write about the project as if it was his 'personal' initiative (this has an effect of misinformation and empty heroism); while one contradiction in the third text relates to depicting events from the perspective of those in power (and the contradictions embedded therein) as if they were representing common people. But there is also another general contradiction which lies at the meeting point between the language of 'helping the poor' 129, the economic motive of companies and the drive to experiment new technologies in "third world" sites like Kasese. Take an example of this text sample from one of the respondents (Int.11). In the sample, "AB" is me. 'Int.11' is the interviewee's number on the list of interviewees (see appendix B).

AB: *Tell me about yourself and the organization.*

Int.11: (...). Around 2010, we started looking at potentially developing business in Africa, based on the technical designs. I was the CEO of systems teknik at that time. And that led us to, for the start in Ghana. And then at some point in time we got contact with an entity, a Danish Access to Innovation. And they told us that we should actually focus on Eastern Africa instead. So we went to Tanzania for the start, and visited, there is a training center there. And started developing some ideas. But we were recommended to have a closer look at the Champion district initiative in Kasese area. So, after a while we focused on that instead, and entered in cooperation with WWF and the local Kasese people and developed the Kayanzi Micro-grid.

AB: Why did Access to Innovation recommend East Africa?

Int.11: I think the right answer is that they had a foothold in East Africa at that time. So, we entered into that cooperation and the local group at Kayanzi formed a SACCO. They started to build this house where the control system is located.

AB: Who builds [the house]?

Int.11: The house was built by the SACCO. And then something happened in Denmark at systems teknik because we got some contacts to a utility company in Denmark, which seemed to have an interest to work with this kind of technology and try to address those needs. So, that after sometime led to an agreement where we took those activities out of systems teknik and then we handed over to a new company called REMEGY – which is an abbreviation for Renewable Emerging Markets Energy. So, we created another company, having this entity as a shareholder along with systems teknik, and then the idea was to continue the activities within REMEGY. Actually we did that. We completed the Kayanzi installation, and then tried to establish a revolving fund for the SACCO. They will be paying in installments, basing on their consumption of power. Actually the business model was developed as part of the project in the cooperation with the WWF. We took an investment, and the idea was that after 3-4 years, the return should come from the SACCO based on the consumption and agreed tariff. And the tariff was calculated in a way that if you compare a typical household cost of mobile phone charging etc., it should give them a saving from day one. And after these 3-4 years, they would have the power for free.

After being in operation for a year or so, a disagreement arose among the shareholders of REMEGY, and they decided to close down the company. And that sort of left the SACCO in-between because somebody, or a company, nologer existing, put a micro-grid installation there. And in turn it ended in the way that WWF took over the Project.

Above we see a Danish (startup) company, systems teknik, setting out to explore the continent of Africa in search of potential sites to "developing a business...based on technical designs".

12

¹²⁹ 'Helping' them to overcome the presumably self-imposed poverty and environmental degradation.

The journey shortly began in Ghana from where the company was advised by access to innovation 130 to instead focus on East Africa. Tanzania was the entry point, which was left briefly after to settle with Uganda instead, and Kasese became a site for the company's potential business¹³¹. But even then, the company's business activities were short lived. A new company, REMEGY, took over which also corrupsed within a year due to shareholder disagreements in Denmark.

From that rather sad story of systems teknik, we can note that the upsurge of optimism regarding renewable energies, optimism that indeed has its strong points, has emerged a new form of scramble for third world sites by renewable energy companies not only to experiment and to test their new technologies 132, but also to market them for business. Yet, despite advancing on the language of helping the poor, the primary aspiration, at least from the likes of systems teknik, is business, which has nothing to do with helping anybody. This contradiction costs people in the global South so dearly¹³³. We need to emphasize from this example that the experimentation tendency (which people like Bhattacharyya (2004)¹³⁴ have observed and strongly warned against) transcends turning the global South into technological laboratories of companies from the global North (and elsewhere). The whole process involves people, and damage to communities is tremendous when their hopes and desires are recklessly summoned¹³⁵ and such experiments either do not work¹³⁶ or completely fail.

THANKS, BUT WAIT A MINUTE

Now I turn to the views of some of the citizens of Kasese I interacted with regarding the initiative and the entirety of new energy activities in the district. A common tendency in the discourses of local citizens regarding the impact of the new energy activities through the CDI is what one may call 'conditional gratitude' (thanks but...). One reason for this attitude is the

¹³⁰A Danish organization "designed", as the story goes in its documentary, "to help" businesses like this one "to build the right platform" for their "future business" (see paragraph seven of the text attached on appendix G).

¹³¹Where they established the Kayanzi Solar mini-grid (see appendix C).

¹³² As A2i praises these two in Uganda: "...Danish green-tech companies, CO2 Light and Danish Solar Heat, are on the verge of making it big in Eastern Africa. In 2013; they established the Company, Solar Power Africa, and have installed a demonstration solar Power system on the Kampala Industrial Plant Roofings, to prove that solar panels is a right choice for bigger scale solutions." (see paragraph 3 of the text on appendix G).

¹³³From losing taxes as they offer tax-breaks to new energy techs, to offering them free land on top of the poor themselves acting as a market for these new technologies.

¹³⁴He notes that "[t]he poor being the most vulnerable segment of the society should not be made targets of such technological experimentation, unless of course such trials involve no money outgoes for the poor individually or as a nation. However, the present experience shows that the poor are the main targets and perhaps they are not economically better off with these technologies unless they get such technologies free of charge." (Bhattacharyya 2004: 662).

¹³⁵As Int.09 notes: "...we have really created awareness. Now people are saying: where is this? We want this. So, we have raised people's expectations. Now meeting those expectations is not easy."

¹³⁶Again on this, Int.09 noted that "some of the technologies are not of the best standard. Like we had BBOXX, it had a very good marketing strategy, it had moved across the district, almost every village with their technologies but shortly they closed. Why? Because the quality of the products was poor.".

desire to renegotiate their new position as both 'customers' and 'consumers' of new energy technologies and the power these technologies generate. A key target of most of them is the cost of these technologies¹³⁷. Let's take another text sample from Int.04, who is the head of the local savings cooperative soliciting funds to buy the Kayanzi solar mini-grid. Here is the sample:

It was good for our Community to have Power. But except the tariffs are high. Because we have to pay it in three years. And as we have been talking to these people, they said we are buying it at the cost of 77,000 U.S. dollars. When you put it in Ugandan money; that is a lot of money! So, that is a challenge. Then when it came to the payments of people getting connected, some people saw that the cost is higher than [power from] the national grid. Even the numbers have reduced because of that high tariffs. We appreciate so far what WWF has done in this end. In this Champion District Initiative. But, still, we have some challenges. Because since the installation of this plant; no MoU has been signed with remegy energy. The sustainability of this plant, we do not know. The other thing is the maintenance of the plant. When it gets some fault, we have to call technicians from Kampala. We do not know how to maintain it from this grassroots.

Int.04 raises the question of the price his villagemates have to pay to access the new technology (as so do Int.05 and Int.06). But Int.04's discourse goes beyond costing, to include also the future of the installation, the "sustainability" as he calls it. This way, he is rejecting the commonplace notion that new energy technologies such as solar panels are simply tools to be used and laid down as one desires. It is to point to the complexity of a 'system', not a 'tool' – as the likes of Ullrich (2010) and Sachs (2008) forcefully argue – on their village and its (systemic) requirements apparently beyond the capabilities of members on the village. As can be noticed, when Int.04 complains about the MoU between the village SACCO and REMEGY energy; what he seems unaware of is that actually, REMEGY is nologer existing.

Int.05 adds another dimension. His version paints a picture of a people tantalized, like *Tantalus* in the Greek mythology. But he also mocks parts of the main discursive line in the dominant discourse; the idea that, as can be seen in the mayor's article, "solar for lighting and biogas for cooking has replaced traditional three-stone method of cooking..." ¹³⁸. Int.05 laments:

People are now connected. Some who managed, they are connected. But the challenges, they are like more than five. One: they gave us power which is not enough to our expectations. Because we thought that the power they are bringing will be like the grid power.

Those who are using power, many of the people get power only from 7pm-12:00am. Only six hours. Beyond mid-night, you switch back to your candles [the *tadooba*] which was supposed to be thrown away. So it remains the same.

The installation is generally good. But many people say the charges are too high. Another thing, people want power throughout. Morning to morning - no limitations on use.

_

¹³⁷This is seen as ironic since the district does not levy taxes on all businesses and organizations that deal with renewable energy technologies.

¹³⁸See paragraph 5 of the mayor's text on appendix E.

As I end this section, in a wake of a tough discursive struggle to defend fragments of ways of life under a relentless decimation by advancing forces of 'modernity'; some residents have found it necessary to explain and rearticulate the values and cultures around their modes of energy use and access. Not in complete rejection of 'new' forms of energy, but in highlighting the quite often misrepresented image of the 'old'. One old woman, who did not accept a longer interview, noted to me that the 'three-stone stove', which is the central point of attack by adherents of new energy technological forms, is being ruthlessly de-campaigned because it's seen as simply an outdated, inefficient and health-damaging smoke-stack 'cook stove'. Yet above all, she added, it is an embodiment of long-standing cultural values and norms like an education model based on story-telling around this fireplace which are all at risk of being expunged from memory of communities in the district as new uncompromising technological categories set hold. When I asked her about the phenomenon of tree cutting and the problems arising therefrom, she fired the question back to me in her trembling voice: "who is cutting down trees?" She added that trees [in public lands] are cut down by those who sell firewood. Her resentment of the idea that most of (if not all) "rural poor" folks destroy forests for firewood is a line many people who grew up in various villages of the country, including myself, can relate to. The language of "cutting down trees" has to be strange if invoked before people who only knew of "collecting/fetching firewood" ¹³⁹.

5.6. Post-development, Poverty alleviation practices, and Sustainable Development

This part is a theoretical discussion. With the overall picture from the analysis in view; I engage literature on Post-development to draw insights that can enrich the debate on poverty and its alleviation practices (like those based on alternative energy technologies in Kasese) and the wider (sustainable) Development practice(s). The discussion in part attends to subquestion five of this study set out in the 'Introduction'.

SUSTAINABLE DEVELOPMENT

_

Not many works, not many writings, manages to attain a "classical status" as early as the work of the 1987 World Commission on Environment and Development (WCED) has managed to attain. The commission, whose report flagged off the global discourse on

¹³⁹This is not simply a matter of contestation of meaning or interpretation as the case can be with say "freedom fighter" and "terrorist" (See Fairclough 1992: 74). "Fetching/collecting firewood" is distinctively different practically from "cutting down trees". The latter involves collecting fallen dry pieces mainly for domestic or subsistence use; the latter involves complete destruction of the whole for whatever reason that may be.

"Sustainable Development" (Redclift 2014: 484, 2005: 212f; Escobar 2002: 48; World Bank 1992:8), entails a now classical definition of "Sustainable Development": "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987: 31). The rise of "sustainable development" indeed had a long gestation. But all in all, there is widespread recognition that by bringing to the fore environmental issues at the international level for the first time in such a manner; the 1972 Stockholm conference on the human environment laid the ground for the work of the WCED, and many other developments that ensued within the domain of environment and Development (Sachs 2010: 24ff; 1999: 57; Drexhage & Murphy 2010:7).

However, despite the ambiguous language that seeks to appeal to everyone; many (particularly Post-development) thinkers have attacked the concept and its fleet of practices as yet another hypocritical renewal of the same old Development agenda. It appears to them as *old wine* seemingly packed in *new bottles*¹⁴⁰. Hence Arturo Escobar warns that:

"care must be taken to safeguard this new [Post-Development] discourse from the attempt by dominant forces to salvage development – through fashion-able notions such as "sustainable development"..." (see Escobar 1992: 26).

Sustainable Development's intent, right on spot, to sustain nothing else but "Development" (which keen entities like the World Bank appropriated by directly (re)defining Sustainable Development as "development that lasts 141"); the deliberate ambiguity – "needs", "future generations" etc. (Redclift 2014; 2005); the clinging onto old problematics – economic growth is the key to wellbeing, poor countries must *catchup* with the developed ones and so on (Castro 2004; Rist 2008); the transmogrification of *nature* into the *environment* hence turning nature into an exclusive frontier for economic growth (Escobar 2002) and the sheer timidity to challenge the capitalist industrial system which impoverishes both people and nature – as Klein (2014) observes – opting instead to construct 'the poor' mainly as *villains* in committing crimes against nature (Sachs 2010, 1999, 1992; Rist 2008; Escobar 2002) have all been critical reflections on Sustainable Development from Post-development thinkers. To sum-up, within a wide section of Post-development thinkers; Sustainable Development *is* Development disguised. Between the "old" (Development) and the "new" (Sustainable

¹⁴⁰Save for a few readings of Sustainable Development theory and Post-development theory, such as that proposed by Morse (2008) – Morse, S., 2008. 'Post-(sustainable) development?', *International Journal of Global Environmental Issues*, 9(1-2), 110-129 – suggesting (not unproblematically) that the Post-development critique of Development is already incorporated in Sustainable Development theory.

¹⁴¹ See World Bank (1992: 34)

Development) is nothing but a continuance. Sustainable Development may qualify to be a *Development alternative*, but, certainly, it cannot fit in the framework of an *alternative to Development* which is the central concern of Post-development.

POVERTY AND PRACTICES TO ALLEVIATE IT

Laderchi et al., (2003) ask an important question: "Does it Matter that we do not agree on the Definition of Poverty?..." To that, thinkers like Majid Rahnema would respond that perhaps it should not matter, since the reality of poverty is such that everyone on the planet can in one way or another be categorized as 'poor' (see Rahnema 2010). As such, we may not agree on a common definition, since there can never be one. However, that said, it is imperative that those who set out to intervene in social lives of others, to treat what they consider as 'poverty' in others, need to be as precise as possible regarding what they actually intend to solve¹⁴².

The question of 'poverty' is as old as Development itself (Cowen & Shenton 1996¹⁴³). However, there is widespread agreement that 'Modern poverty' dates back to the Post-World War II era, to computations of Gross National Product (GNP) and comparisons of such GNPs between countries of the global South and those of the North particularly with the United States (Rahnema 2010: 178; Illich 2010: 100f; Escobar 1995: 23f; Sachs 1992). This was the genesis of the late-modern view of 'the poor' as those who "lack" what the affluent have (White 2014: 110; Rahnema 2010: 175; 1991: 4; Escobar 1995: 21. cf. Kanbur & Squire 2001: 185). Being 'poor' became a problem and 'economic growth' the answer (Sachs 1992).

Post-development problematizes the question of poverty. Many Post-development thinkers maintain that Poverty takes various forms in various social contexts. Moreover, there are even noble aspects of poverty like those that take "frugal" and "convivial" forms. The version of poverty which local and international do-gooders grapple with today is conceptualized as "imposed poverty", "destitution" (see Rahnema: 2010: 174) or "modernized poverty" (Illich 1976: 81; 1973: 83; 1973: 4; 1970: 154). Such Poverty only arises during the process of intense (economic) Development after eroding away people's basis for subsistence living (Rahnema 2010: 187, 1988: 118f; Sachs 1992).

¹⁴²The commonplace attitude of "people are suffering, just act, there is no time to think" which defines the work of many global do-gooders today (an attitude criticized by the likes of philosopher Žižek) has to be completely rejected. What if those people love their suffering? (see Slavoj Žižek lecture on "the year of distraction". Available: http://zizekpodcast.com/2016/04/21/ziz042-year-of-distraction/).

¹⁴³In depicting the history of Development, Cowen & Shenton (1996) find out that it arose out of the need to address the social ills like unemployment, mass poverty and others that had been set into motion by the advent and advance of capitalism in Europe.

Most importantly, Post-development, regarding the question of poverty, also raises questions of politics, of power, of social relations (for example Rist 2008: 228f) but also of ethics¹⁴⁴. We can see Poverty as "a social construct", whose "definition varies according to whoever formulates [it]" (Rist 2008: 230); "a construct, and an invention of a particular civilization" (Rahnema 2010: 174); [modern poverty as] a regime of third-world representation through a discourse invented by the West (Escobar 1995: 21ff). But also, Post-development thinkers maintain that 'poverty' is unthinkable without its assumed opposite: wealth. Poverty and wealth are inseparable ¹⁴⁵. As such, a talk on (or a struggle against) poverty is unhelpful without a corresponding talk on (or struggle against) wealth (Rist 2008: 230). To 'help the poor', one must also think of 'helping the rich'.

ALTERNATIVE ENERGY PRACTICES AND BASIC NEEDS

Preceding analyses of texts indicated how the notion of 'basic needs' dominates what many actors in Kasese think of poverty. These analyses also indicated how, in line with the dominant economic ideology, most actors position their activities within an economic frame hence suggesting that new energy forms ¹⁴⁶ can alleviate poverty from an economic perspective.

Sachs (1999) notes that the notion of 'basic needs' emerged in the 1970s¹⁴⁷ from the failure of the then dominant trickle-down economics-based Development dogma (Ibid: 6). The 'basic needs approach', which the then World Bank President Robert McNamara steered in 1973, served to correct the wrongs of the previous era of growth by (ironically) launching a new one strictly oriented to the "needs" of "the absolute poor" who had allegedly been left out by the first growth operations (see Illich 2010: 97f; Rist 2008: 162; Sachs 1992).

In 1978, the enthusiasm of McNamara on the need for all Development interventions to espouse "basic needs" epitomized into the work of Streeten and others (see Streeten et al., 1981) which among other things sought to operationalize the so-called "basic needs approach" to Development. The immediate practical effect of this new invention was a shift,

_

¹⁴⁴For example, regarding the idea that the poor 'lack' in terms of life necessities; the question is put: "what is necessary and for whom? And who is qualified to define all that?" (See Rahnema 2010: 175. Cf. Escobar 1995: 21).

¹⁴⁵Berner and phillips (2005) captures this more bluntly: "Poverty and wealth are opposite sides of the same coin. The wealthy cannot withdraw from the lives of the poor, and the poor cannot withdraw from the lives of the wealthy..." – See Erhard, B, & Benedict, P 2005, 'Left to their own devices? Community self-help between alternative development and neo-liberalism', *Community Development Journal*, 40, 1, pp. 17-29

¹⁴⁶Seen as one of the 'basic needs' people of Kasese 'lack'

¹⁴⁷In 1981, the World Bank publication which sought to operationalize the concept of "basic needs" into an approach justifies the need to do so inter alia due to the failure of earlier Development attempts if those attempts were to be "judged by the reduction of poverty..." (Streeten et al., (1981: vii).

at least starting from within the World Bank's operations, from a long-term orientation ¹⁴⁸; to a short-term orientation ¹⁴⁹.

However, a link could easily be made between the old Development model based on trickle-down economics and the then new 'basic needs approach'. That link was "economic growth" (Sachs 1992). Everything was still done for the same goal, though modification was done on the means. Things like investments in "human capital resources" of the poor (through education and health improvements), some subsidy and redistribution measures among others were all couched in the language of economic growth¹⁵⁰.

Thus, Rist (2008) notes that the basic needs approach was a recruitment process to the prevailing economic system and the new entrants were the so-called poor. The method of recruitment was to devise mechanisms through which their overall "productivity", the harbinger of economic growth, could be increased (Ibid: 163). For Illich (2010), the "needs discourse" transformed human nature: it witnessed the mutation of the "economic man" (homo economicus) into "man the needy addict" (homo miserabilis) and it also set the ground for the arrival of human beings as seen from their systems requirements (homo systematicus). Citizens turned into cyborgs (See Illich 2010: 96f, 106ff). What the "basic needs" approach achieved, at best, was in providing a new lease of life to the ailing economic growth model (Sachs 1992), providing a justification for the continuity of the Development agenda in the global South. It can thus be said that in this way, the "basic needs approach" also functioned ideologically. It disguised a particular view of "needs", packaged it with a label of human and sold it globally as universal¹⁵¹. The renowned fact that "needs" vary across social spaces and time (as Rist 2008: 167 observes) or that some societies culturally live affluently by desiring less as opposed to living poor by desiring more (as Sahlins 1997 observes – cf. Sachs 1999: 209f) was overthrown by the linear view of history: more needs, less means everywhere.

Today, "alternative energies" are, in a certain way, being used to do for 'sustainable Development' the ideological work similar to that done by "basic needs" to 'Development' in

¹⁴⁸Economic growth will do wonders for the poor in the long-run.

¹⁴⁹Satisfaction of the needs of the poor is vital for economic growth.

¹⁵⁰One of the reviewers of Streeten et al., (1981) (however extremely uncritical he was in defending the approach and decrying the fact that the United States and other entities had been slow to adopt it) notes that "basic needs" approach ushered in not a new approach but rather a new approach to justifying the old one. That is to say, that what had changed in the "new" approach was just the *modus operandi* for achieving economic growth, which was still believed to be the key to Development. See Curry Jr., RL 1983, 'FIRST THINGS FIRST: MEETING BASIC HUMAN NEEDS IN DEVELOPING COUNTRIES (Book)', *Journal Of Economic Issues (Association For Evolutionary Economics)*, 17, 3, pp. 846-849.

¹⁵¹Without "basic human needs", how could one subscribe to the category of "human"? Hence, it can be said that "basic needs" flagged of a new frontline of struggle in the global South. Not just to become part of the "saved" and "civilized" world proclaimed by colonialism, but a struggle to qualify to be called human – at least a sub-human who can only manage to achieve the professionally determined 'basic needs'.

the 1970s. The basic needs approach promised to enhance long-term growth from the bottom-up – by enhancing the productivity of the poor; the promise with new and renewable forms of energy is to drive economic growth and Development into a truly everlasting mode (thanks to ever-lasting energy). Similarly, basic needs approach aimed at 'absolute poverty' which had persisted and hindered growth; new forms of energy are purporting to finally settle the question of poverty (again through economic growth). On this, Illich (1974) sounded one of the earliest alarms which I will dare to repeat:

The widespread belief that clean and abundant energy is the panacea to social ills is due to a political fallacy, according to which equity and energy consumption can be indefinitely correlated, at least under some ideal political conditions. Labouring under this illusion, we tend to discount any social limit on the growth of energy consumption (Illich 1974: 5f).

In the conventional drive for more energy, more productivity, more economic growth and more wellbeing; he saw an enslaving tendency – every country that adopts this linear view definitely becomes enslaved to needing more and more industrial outputs (Ibid: 10). This is what he means when he says:

Even if non-polluting power were feasible and abundant, the use of energy on a massive scale acts on society like a drug that is physically harmless but psychically enslaving (Ibid: 6).

His idea was not to suggest that new forms of energy are necessarily bad; what he questioned was their reckless appendage to the economic ideology of infinite growth, which destroys not just the natural environment but also the possibilities for a "participatory democracy" (P.12) and gives shape to a kind of "radical industrial monopoly" where expert knowledge reigns supreme, reducing citizens to permanent consumers (Ibid: 43ff. cf. Rahi 2011: 9).

He therefore opted for low energy quanta, "the third way" which any society can determine within its own context by setting some social "limits" or "ceiling" on energy use. It is from there that he saw a "participatory democratic potential" and the possibility for energy to enhance "social relations that are characterized by high levels of equity" (Illich 1974: 5). Such an energy vision was also core to his vision of a "convivial society" (See Illich 1973: 12). In such a society, the economic logic is permanently subverted; the logic of "sufficiency" replaces that of "efficiency" (Sachs 1999: 87f).

social control and the rise of what he calls "a computerized leviathan" (P.4-5).

_

¹⁵²He depicted three energy policy routes: one that directly links wellbeing to high per capita energy use; one that is characterized by "efficiency" in energy transformation; and one "with least possible use of mechanical energy by most powerful societal members. He notices that there is widespread promotion of the first two, which calls for inter alia strict

5.7. REFLECTION ON THE ANALYSIS

To what extent does this analysis stands out as 'a critique' within the context of CDA? In terms of CDA, all forms of critique have to be aware of their social implications, which calls for self-evaluation on the extent to which the critique succeeds in siding with those who suffer from discursive injustices and abuse of discourse and language use in society (Fairclough 2001; van Dijk 2001). First, in as far as this is concerned; the analysis here has dared to (among other things) highlight ideological hotspots of the discourse in question, hotspots that quite often, in the midst of winds of optimism around alternative energies, go unnoticed. Second, by highlighting these ideological hotspots, the analysis seeks to provide discursive resources to all victims of the ideological operations of the discourse in question, especially the people Kasese where this study was conducted. Finally, the analysis breaks the ground for alternatives to the dominant discourse. This is the work of sub-section 5.5 above. The general intent is that all these can serve as resources people can use in articulating and negotiating their positioning in practices that link alternative energies to social questions like poverty.

6. CONCLUSIONS

To what extent can alternative energy technological solutions contribute to the alleviation of poverty according to particular discourses? This has been the lead-question – along with others – for this deliberation. It should be decried that serious social analysis of energy, and in this case alternative energy forms, has recently been suffocated by an avalanche of optimism that has come to dominate debates on these energies within the context of transitions from fossil fuels. The cover of this optimism, however well-intended it might seem, has got to be transcended, even subverted, if social questions that are connected to the 'old' energy system are to be effectively addressed in the 'new' one.

Regarding alternative energy technological solutions and poverty alleviation; the critical review of literature in chapter one and analysis of different communicative events in chapter five have in part underscored, in many ways, the dark side of the idea that alternative energies can alleviate 'poverty'.

First of all, within the context of Kasese district in Uganda, the dominant conception of 'poverty' by actors seeking to solve it through alternative energy technological solutions, that is, 'poverty' as 'lack' of 'basic needs' among which is energy, is but familiar. Despite the lipservice done to it in different communicative events (as those analyzed in chapter five above); it is linkable to the Development discourses and practices which dominated the 1970s, and which have since then continued to resurface in different ways. This conception of 'poverty' and the 'solutions' it gives birth to, succeeds only in as much as it succeeds in reducing the complexity of 'poverty' to a few convenient and controllable variables in a process which involves making implicit assumptions, like the assumption that questions of power, wealth, ethics, social relations and structures can remain constant.

Rist (2008) argues, regarding the notion of "basic needs", that "society cannot be reduced to a 'human zoo', in which the only needs not usually satisfied are the ones that are probably most treasured: space and freedom" (Ibid: 168). Similarly, regarding such convenient definitions of poverty, it should be emphatically stressed here that society cannot be reduced to a human 'laboratory' of sorts in which conditions can be controlled and manipulated according to the experimental choices of whoever holds a test-tube. Social conditions are different. Questions of power, social relations, wealth, ethics and context cannot simply be wished away. They remain despite being ignored.

Secondly, the major link articulated by many actors in Kasese *apropos* how their energy technological solutions can alleviate poverty, that is, "economic growth" (through pushing, in different ways, for, among other things, the "productive uses" of alternative energy technologies in the district) is also not new. It goes way back to the very origins of 'poverty' in Western Europe (see Cowen & Shenton 1996), and cuts through the 'discovery of poverty' in President Truman's "underdeveloped" areas in the post-war period (see Escobar 2012; Sachs 1992). "Economic growth" did not work then. It cannot work now.

Thirdly, the dominant conception of poverty and how it can be alleviated by new forms of energy as depicted above connects this alternative energy-poverty discourse to the mainstream Development discourse and practice. This way, and as the analysis in chapter five above has indicated, it is inferable that the discourse functions ideologically with an effect of legitimizing and cementing the Development agenda in the district and the country at large.

In Kasese, and Uganda in general, the practical effects of this ideological intervention are quite perverse. Local leaders in the district, like the mayor, cannot help but reproduce, in many ways, the premises of the discourse. For instance, the district council passed a resolution to eliminate taxes for all renewable energy companies operating in the district. Taxes on profit-seeking companies have turned into "an obstacle". The council's move, as I learnt, is part of Kasese district leadership's new responsibility in the Champion district initiative, which is "creating an enabling environment". The district council has also promised, on top of a tax free environment, to offer "free land" to all serious renewable energy businesses wanting to establish themselves in Kasese. It is clear that all this is in part due to a manipulative language embedded in this discourse, language which for instance constructs practices of new energy companies as being primarily in the interest of "the poor" residents in the district, residents who have 'worsened their poverty condition' by 'destroying the natural environment' around them.

As I conclude, I think we need an honest debate about issues to do with new forms of energy and their relation to social questions like poverty. This debate has to be deeply reflective, handling each question with the kind of seriousness it deserves. It has to pay attention to the complex nature of poverty, and yes, it also has to transcend current optimism regarding new energy technologies by comprehending also the limitations of these technologies. No doubt, renewable energy forms are needed in different ways given the current global ecological context. But that should not lead to blinding awareness that as of now, most of these technologies like solar panels are still products of industry, industry that still considerably run

on fossil fuels. It should also not make us forget about the inherent danger in the ongoing reckless appendage of new forms of energy to the ideology of "economic growth" and its assumptions of infinite resources and a worldview of a linear race of all to the top – well aware that with such appendage, as the likes of Illich (1974) and Ullrich (2010) have argued, social problems partly rooted in the regime of fossil fuels will stay with us in the regime of renewables. In section 5.6 above and elsewhere, I have indicated that aspects from Post-development theory can provide useful critical insights on all these issues.

REFERENCES

- Action, P 2010, *Poor people's energy outlook 2010*. Online, Available at: http://practicalaction.org/docs/energy/poor-peoples-energy-outlook.pdf Accessed July 30 2016.
- Agostino, A 2007, 'Post-development: unveiling clues for a possible future', In: Ziai, A., 2007 (Ed.) *Exploring post-development: theory and practice, problems and perspectives.* Routledge.
- Andreasson, S 2005, 'Orientalism and African Development Studies: The 'Reductive Repetition' Motif in Theories of African Underdevelopment', *Third World Quarterly*, 6, p. 971.
- ————— 2010, Africa's development impasse: rethinking the political economy of transformation, London & New York: Zed Books.
- Anfara, V, & Mertz, N 2006, *Theoretical Frameworks In Qualitative Research*. [Elektronisk Resurs], n.p.: Thousand Oaks, Calif.; London: SAGE. Online. Available at: http://methods.sagepub.com/book/theoretical-frameworks-in-qualitative-research . Accessed July 22, 2016
- Angelsen, A., & Wunder, S 2003, Exploring the forest–poverty link: key concepts, issues and research implications (No. CIFOR Occasional Paper no. 40, pp. viii-58p). CIFOR, Bogor, Indonesia.
- Aram, Z 2004, 'The Ambivalence of Post-development: Between Reactionary Populism and Radical Democracy', *Third World Quarterly*, 6, p. 1045.
- Armaroli, N, & Balzani, V 2007, 'The future of energy supply: Challenges and opportunities', *Angewandte Chemie-International Edition*, 46, 1-2, pp. 52-66.
- Arnold, J, Köhlin, G, & Persson, R 2006, 'Woodfuels, livelihoods, and policy interventions: Changing Perspectives', *World Development*, 34, pp. 596-611.
- Barnes, D, & Floor, W 1996, 'RURAL ENERGY IN DEVELOPING COUNTRIES: A Challenge for Economic Development', *Annual Review Of Energy & The Environment*, 21, 1, p. 497
- Beg, N, Morlot, J, Davidson, O, Afrane-Okesse, Y, Tyani, L, Denton, F, Sokona, Y, Thomas, J, La Rovere, E, Parikh, J, Parikh, K, & Rahman, A n.d., 'Linkages between climate change and sustainable development', *Climate Policy*, 2, 2-3, pp. 129-144.
- Bhattacharyya, SC 2006, 'Viewpoint: Renewable energies and the poor: niche or nexus?', *Energy Policy*, 34, pp. 659-663.
- 2014, 'Energy and development', In: Desai, V, & Potter, R 2014 (Eds.), *The Companion To Development Studies. [Elektronisk Resurs]*, n.p.: Abingdon, Oxon; New York: Routledge.
- Bourdieu, P. & Wacquant, L 2001 'New Liberal Speak: Notes on the New Planetary Vulgate', *Radical Philosophy* 105: 2-5.
- Brew-Hammond, A 2010, 'Energy access in Africa: Challenges ahead', *Energy Policy*, 38, Greater China Energy: Special Section with regular papers, pp. 2291-2301.
- Brew-Hammond, A, Mensah, G, & Amponsah, O 2014, *Energy Poverty In Sub-Saharan Africa: Poverty Amidst Abundance*, n.p.: Oxford University Press, Oxford Scholarship Online
- Brew-Hammond, A., & Kemausuor, F. 2009, 'Energy for all in Africa—to be or not to be?!', *Current Opinion in Environmental Sustainability*, *I*(1), 83-88.
- Bryman, A 1992, Quantity And Quality In Social Research, n.p.: London: Routledge

- Burr, V 2015, Social Constructionism. [Elektronisk Resurs], n.p.: London: Routledge.
- Byrne, J. and Toly, N., 2006, 'Energy as a social project: Recovering a discourse', In: Byrne, J., Toly, N. and Glover, L. (eds.) 2006. *Transforming Power: Energy, Environment, and Society in Conflict* (Vol. 9). Transaction Publishers.
- Castro, CJ 2004, 'Sustainable Development: Mainstream and Critical Perspectives', *Organization And Environment*, 17, 2, pp. 195-225.
- Chifamba, N., Oketcho, D 2013, Our solutions: Improving Energy Access through a district led approach, Available on WWF Website: http://wwf.panda.org/who_we_are/wwf_offices/uganda/wwf_uganda_our_solutions/. Accessed December 2015.
- Chouliaraki, L, & Fairclough, N 1999, *Discourse In Late Modernity: Rethinking Critical Discourse Analysis*, Edinburgh, Scotland: Edinburgh UP.
- Christensen, D, Drysdale, D, Hansen, K, Vanhille, J, & Wolf, A 2014, 'Partnerships for development: municipal solid waste management in Kasese, Uganda', *Waste Management & Research*, 32, 11, pp. 1063-1072.
- Clancy, J., Oparaocha, S, & Roehr, U 'Gender equity and Renewable energies' In: Assmann, D, Laumanns, U, & Uh, D (Eds.) 2006, *Renewable Energy: A Global Review Of Technologies, Policies And Markets*, n.p.: Sterling, VA: Earthscan.
- Cook, P 2011, 'Infrastructure, rural electrification and development', *Energy For Sustainable Development*, 15, Special issue on off-grid electrification in developing countries, pp. 304-313.
- Corbridge, S 1998, "Beneath the Pavement Only Soil': The Poverty of Post-development: Review Article', *Journal Of Development Studies*, 34, 6, pp. 138-148
- Creswell, JW 2007, *Qualitative Inquiry & Research Design : Choosing Among Five Approaches*, n.p.: Thousand Oaks : SAGE.
- Davidson, O., Halsnaes, K., Huq, S., Kok, M., Metz, B., Sokona, Y., & Verhagen, J 2003, 'The development and climate nexus: the case of sub-Saharan Africa', *Climate Policy*, 3(sup1), S97-S113.
- del Rio, P, & Burguillo, M 2009, 'An empirical analysis of the impact of renewable energy deployment on local sustainability', *Renewable And Sustainable Energy Reviews*, 13, 6, pp. 1314-1325.
- Dincer, I 2000, 'Renewable energy and sustainable development: a crucial review'. *Renewable and Sustainable Energy Reviews*, 4(2), 157-175.
- Distasio C 2015, 'Can a small district in Uganda pressure the world to invest in renewable energy?', *Inhabitat*, Available: http://inhabitat.com/can-a-small-district-in-uganda-pressure-the-world-to-invest-in-renewable-energy/ Accessed June 2016.
- Doyle, J 2002, 'Feature: A question of choice? Access to energy solutions in Ethiopia, Kenya and Uganda', *Refocus*, 3, pp. 24-26.
- Drexhage, J. and Murphy, D., 2010. Sustainable development: from Brundtland to Rio 2012. *United Nations Headquarters, New York*, pp.9-13.

- Escobar A 1995, 'Imagining a post-development era', In: Crush, JC (Eds.) 1995. *Power of development*. Psychology Press.

- Esteva, G 2010, 'Development' In: Sachs, W 2010 (Ed.), *The Development Dictionary: A Guide To Knowledge As Power*, n.p.: London: Zed.
- Fairclough, N 1989, Language And Power, n.p.: London: Longman.

- 2001, 'The dialectics of discourse', *Textus*, *14*(2), 231-242.
- Fisher, M 2004, 'Household Welfare and Forest Dependence in Southern Malawi', *Environment And Development Economics*, 9, 2, pp. 135-154.
- Flyvbjerg, B., 2006. Five misunderstandings about case-study research. *Qualitative inquiry*, 12(2), pp.219-245.
- Garcia, I 2015, *If you don't engage in wishful thinking: 100% Renewable is your bet!*, Available: http://www.power-to-the-people.net/2015/11/if-you-dont-engage-in-wishful-thinking-100-renewable-is-your-bet/ Accessed June 2016.
- GEF 2009, Investing in renewable energy: the GEF experience, Online, Available: https://www.thegef.org/sites/default/files/publications/gef_renewenergy_CRA_rev_3.pdf. Accessed April, 10 2016.
- Goldenberg, J 2005, 'Development and Energy', In. Bradbrook, A. J., Lyster R., Ottinger, R. I., & Xi, W (Eds.) 2005, *The Law Of Energy For Sustainable Development*, n.p.: Cambridge: Cambridge.
- Gomm, R., Hammersley, M., & Foster, P 2000, 'Case study and generalization', *Case study method*, 98-115.
- Green, HE 2014, 'Use of theoretical and conceptual frameworks in qualitative research', *Nurse Researcher*, 21, 6, pp. 34-38 5p.

- Guardian, UK 2015, *Ugandan mayor: My district will be 100% renewable by 2020*, available: https://www.theguardian.com/global-development-professionals-network/2015/oct/20/ugandan-mayor-my-district-will-be-100-renewable-by-2020. Accessed February 2016.
- Gustavsson, M., Broad, O., Hankins, M., & Sosis K 2015, 'Energy Report for Uganda: A 100% renewable energy future by 2050', WWF-UCO, available:

 http://www.wwf.se/source.php/1617031/energy report for uganda 2015.pdf. Accessed June 2016.
- Halff, A, Sovacool, B, & Rozhon, J 2015, *Energy Poverty: Global Challenges And Local Solutions*, n.p.: Oxford: Oxford University Press.
- IEA 2011, World Energy Outlook 2011, IEA, Paris. DOI: http://dx.doi.org/10.1787/weo-2011-en
- ——2014, World Energy Outlook 2014, IEA, Paris. DOI: http://dx.doi.org/10.1787/weo-2014-en
- Illich, I 1973, Deschooling Society, n.p.: Harmondsworth
- ———— 1973, Tools For Conviviality, n.p.: London

- ———— 1974, Energy And Equity, n.p.: London.
- Jacobson, A 2007, 'Connective Power: Solar Electrification and Social Change in Kenya', *World Development*, 35, pp. 144-162.
- Jamasb, T 2006, 'Between the state and market: Electricity sector reform in developing countries', *Utilities Policy*, 14, pp. 14-30.
- Kanbur, R. and Squire, L., 2001. The evolution of thinking about poverty: exploring the interactions. *Frontiers of development economics: The future in perspective*, pp.183-226.
- Karekezi, S, Kimani, J, Kozulj, R, & Di Sbroiavacca, N 2004, Editors' introduction, Energy for Sustainable Development
- Karekezi, S., & Kithyoma, W 2003, Renewable Energy in Africa: Prospects and Limits. prepared for: The Workshop for African Energy Experts on Operationalizing the NEPAD Energy Initiative. 2-4 June 2003
- Karekezi, S., Kimani, J., Wambille, A., Balla, P., Magessa, F., Kithyoma, W., & Ochieng, X. 2005, 'The potential contribution of non-electrical renewable energy technologies (RETs) to poverty reduction in East Africa', *Africa Renewable Energy Policy Research Network* (AFREPREN), Nairobi, Kenya.
- Kees, M, & Feldmann, L 2011, 'The role of donor organisations in promoting energy efficient cook stoves', *Energy Policy*, 39, 12, pp. 7595-7599.
- Kibugu, J 2016, *Uganda election: renewable energy projects must not rob locals of their land*, The Guardian, available: https://www.theguardian.com/global-development-professionals-network/2016/feb/18/renewable-energy-projects-must-not-rob-locals-of-their-land-in-uganda. Accessed May 2016.
- Kiely, R 1999, 'The Last Refuge of the Noble Savage? A Critical Assessment of Post-Development Theory', European Journal Of Development Research, 11, 1, p. 30

- Klein, N 2014, *This Changes Everything: Capitalism Vs. The Climate*, n.p.: New York: Simon & Schuster.
- Kvale, S, & Brinkmann, S 2009, *Interviews: Learning The Craft Of Qualitative Research Interviewing*, n.p.: Los Angeles: Sage Publications.
- Laclau, E, & Mouffe, C 1985, Hegemony And Socialist Strategy: Towards A Radical Democratic Politics, n.p.: London: Verso.
- Laderchi, C, Saith, R, & Stewart, F 2003, 'Does it Matter that we do not Agree on the Definition of Poverty? A Comparison of Four Approaches', *Oxford Development Studies*, 31, 3, p. 243.
- Laufer, D, & Schäfer, M 2011, 'The implementation of Solar Home Systems as a poverty reduction strategy—A case study in Sri Lanka', *Energy For Sustainable Development*, 15, Special issue on off-grid electrification in developing countries, pp. 330-336.
- Leidreiter, A 2015, '100% renewable energy: a tool for low-carbon development', *World Commerce Review*, Available: http://www.worldcommercereview.com/publications/article_pdf/998. Accessed January 2016.
- Lie, JS 2008, 'Post-Development Theory and the Discourse-Agency Conundrum', *Social Analysis: The International Journal of Social and Cultural Practice*, 3, p. 118.
- MacLean, L, & Brass, J 2015, 'Foreign Aid, NGOs and the Private Sector: New Forms of Hybridity in Renewable Energy Provision in Kenya and Uganda', *Africa Today*, 62, 1, pp. 57-82.
- Martinot, E, Chaurey, A, Lew, D, Moreira, J, & Wamukonya, N 2002, 'Renewable energy markets in developing countries', *Annual Review Of Energy And The Environment*, 27, p. 309-348
- Marx, K, & Engels, F 1998, *The Communist Manifesto*, n.p.: Rendlesham: Merlin press.
- Mason, J. 2004, semi-structured interviewing. In: Michael S. Lewis-Beck, Alan Bryman & Tim Futing Liao (eds) 2004, The SAGE Encyclopedia of Social Science Research Methods. Sage.
- ———— 2002. Qualitative researching. Sage.
- Matthews, S 2004, 'Post-development theory and the question of alternatives: a view from Africa', *Third World Quarterly*, 25, 2, pp. 373-384.
- 2006, 'Responding to poverty in the light of the post-development debate: Some insights from the NGO Enda Graf Sahel', *Africa development*, 31(4), pp.52-72.
- May, T 2001, Social Research: Issues, Methods And Process, n.p.: Buckingham: Open University Press
- McGregor, A 2009, 'New possibilities? Shifts in post-development theory and practice', *Geography Compass*, 3, 5, p. 1688-1702.
- McKinnon, K 2008, 'Taking post-development theory to the field: Issues in development research, Northern Thailand', *Asia Pacific Viewpoint*, 49, 3, pp. 281-293.
- MEMD (Ministry of Energy and Mineral Development) 2002, *The Energy Policy for Uganda*. Ministry of Energy and Mineral Development, Kampala. Available: http://energyandminerals.go.ug/downloads/EnergyPolicy.pdf. Accessed June 2016.
- ——— (Ministry of Energy and Mineral Development) 2007, *The Renewable Energy Policy for Uganda*. Ministry of Energy and Mineral Development, Kampala.

- Morse, S 2008, 'Post-(sustainable) development?', *International Journal of Global Environmental Issues*, 9(1-2), pp.110-129.
- Nakkazi, E 2014, *Uganda to increase renewable energy access to 61 per cent*, Available: http://www.scidev.net/sub-saharan-africa/energy/news/uganda-increase-renewable-energy.html. Accessed December 2015.
- Nederveen Pieterse, J 2010, *Development Theory : Deconstructions/Reconstructions*, n.p.: Los Angeles; London: SAGE.
- Nielsen, R.L 2014, *Climate Change Planning in Kasese*, available: http://vbn.aau.dk/ws/files/176472026/Samlet_rapport.pdf Accessed April 2016.
- NPA 2015, Second National Development Plan II 2015/16-2019/20, NPA Uganda. Available: http://library.health.go.ug/publications/leadership-and-governance/second-national-development-plan-ii-201516-201920. Accessed March 2016.
- Omer, A. M 2008, 'Energy, environment and sustainable development', *Renewable and sustainable energy reviews*, 12(9), 2265-2300.
- Oparaocha, S, & Dutta, S 2011, 'Gender and energy for sustainable development', *Current Opinion In Environmental Sustainability*, 3, Energy Systems, pp. 265-271.
- Openshaw, K 2011, 'Supply of woody biomass, especially in the tropics: is demand outstripping sustainable supply?' *International Forestry Review*, 13(4), 487-499.
- Overgaard, J. and Nielsen, R.L., *Networks for Sustainable Innovations in Kasese, Uganda*, Aalborg universitet, Available: http://vbn.aau.dk/ws/files/198517118/F_rdig.pdf Accessed June 2016.
- Peet, R, & Hartwick, E 2009, *Theories Of Development: Contentions, Arguments, Alternatives*, n.p.: New York: Guildford Press.
- Peet, R, & Watts, M 2002, 'Liberation Ecology: Development, sustainability, and environment in an age of market triumphalism' In: Peet, R, & Watts, M (Eds.) 2002, *Liberation Ecologies: Environment, Development, Social Movements*, n.p.: London: Routledge.
- Pieterse, JN 1998, 'My Paradigm or Yours? Alternative Development, Post-Development, Reflexive Development', *Development & Change*, 29, 2, p. 343.
- 2000, 'After Post-Development', *Third World Quarterly*, 2, p. 175.
- Rahi, G., 2011. Energy, Equity, and Social Struggle in the Transition to a Post-Petrol World. *Trail Six: An Undergraduate Journal of Geography*, 5(1).
- Rahnema, M 1988, 'A new variety of AIDS and its pathogens: Homo economicus, development and aid', *Alternatives: Global, Local, Political, 13*(1), pp.117-136.

- Rahnema, M, & Bawtree, V (Eds.) 1997, The Post-Development Reader, n.p.: London: Zed.
- Redclift, M 2005, 'Sustainable development (1987–2005): an oxymoron comes of age', *Sustainable Development*, 13, 4, pp. 212-227.

- REN21 2014, Renewables 2014 Global Status Report, Online, Available at: $\frac{\text{http://www.ren21.net/Portals/0/documents/Resources/GSR/2014/GSR2014~KeyFindings~low}}{\%20\text{res.pdf}} \text{ . Accessed September 30 2016.}$
- RENFORUS 2015, *Kasese for clean energy*, Online, available: http://renforusinitiative.net/kasese-clean-energy/. Accessed January 2016.
- Renno D C, Twinamasiko J, Mugisa C P2012, *Kasese district poverty profiling and mapping 2011-2012*, Online, available at: https://www.btcctb.org/sites/default/files/kasese_district_poverty_profiling_and_mapping_--2011-2012.pdf Accessed February 2016.
- Rist, G 2008, *The History of Development: from Western Origins to Global Faith*, 3rd edition, London: Zed Books.
- Sachs, W 1992, 'The discovery of poverty', New Internationalist June 1992 issue 232
- ————1999, *Planet Dialectics: Explorations In Environment And Development*, n.p.: London: Zed Books.

- ———— 2008, *The archaeology of the development idea*. Earthcare Books.
- Sahlins, MD 1997, 'The Original Affluent Society', In: Rahnema, M, & Bawtree, V (Eds.) 1997, *The Post-Development Reader*, n.p.: London: Zed.
- Salleh, A 2016, 'Climate, Water, and Livelihood Skills: A Post-Development Reading of the SDGs', *Globalizations*, 13, 6, p. 952-959.
- Shackleton, C, Shackleton, S, Buiten, E, & Bird, N 2007, 'The importance of dry woodlands and forests in rural livelihoods and poverty alleviation in South Africa', *Forest Policy And Economics*, 9, pp. 558-577.
- Shonali, P, & Daniel, S 2004, 'Energy Use and Energy Access in Relation to Poverty', *Economic and Political Weekly*, 3, p. 271.
- Sidaway J. D 2014, 'Post-development', In: Desai, V, & Potter, R 2014 (Eds.), *The Companion To Development Studies.* [Elektronisk Resurs], n.p.: Abingdon, Oxon; New York: Routledge.
- Sileverio, M 2015, 'City mayor who instigated and oversees a district-wide initiative to boost energy access and protect cultural identity', In: *World Future Council 2015, Are You In? 100% Renewables, Zero Poverty*, Available: https://www.worldfuturecouncil.org/wp-content/uploads/2016/06/WFC_Brot_CAN_Hivos_2015_Are_you_in_100_Renewables_Zero_Poverty.pdf. Accessed April 2016.
- Skutsch, M., & Clancy, J 2006, 'Unraveling Relationships in the Energy-Poverty-Gender Nexus', In. Byrne, J., Toly, N., & Glover, L. (Eds.) 2006, *Transforming Power: Energy, Environment, and Society in Conflict* (Vol. 9). Transaction Publishers.

- Sonntag-O'Brien, V., & Usher E 2006, 'Mobilizing Finance for Renewable Energy' In: Assmann, D, Laumanns, U, & Uh, D (Eds.) 2006, *Renewable Energy: A Global Review Of Technologies, Policies And Markets*, n.p.: Sterling, VA: Earthscan.
- Streeten, P., Burki, S.J., Haq, U., Hicks, N. and Stewart, F., 1981. First things first: meeting basic human needs in the developing countries.
- Sunderlin, W, Angelsen, A, Belcher, B, Burgers, P, Nasi, R, Santoso, L, & Wunder, S 2005, 'Livelihoods, forests, and conservation in developing countries: An Overview', *World Development*, 33, Livelihoods, forests, and conservation, pp. 1383-1402.
- Titscher, S, & Jenner, B 2000, Methods Of Text And Discourse Analysis. [Elektronisk Resurs], n.p.: London: SAGE.
- Trainer, T 2013, 'Can the world run on renewable energy? A revised negative case', *Humanomics*, 29, 2, p. 88-104.
- Tumwesige, V., Fulford, D., & Davidson, G. C. 2014, 'Biogas appliances in sub-Sahara Africa'. *Biomass and Bioenergy*, 70, 40-50.
- Ullrich, O 2010, 'Technology', In: Sachs, W 2010 (ED), *The Development Dictionary: A Guide To Knowledge As Power*, n.p.: London: Zed.
- UN 2015, Addis Ababa Action Agenda of the Third International Conference on Financing for Development, Third International Conference on Financing for Development Final Report, UN, New York. Available online at: http://www.un.org/esa/ffd/ffd3/wp-content/uploads/sites/2/2015/07/Addis-Ababa-Action-Agenda-Draft-Outcome-Document-7-July-2015.pdf. Accessed June 23, 2016.
- Van Dijk, T, A 2001, 'Multidisciplinary CDA: a plea for diversity', In: Wodak, R, Meyer, M, & Wodak, R (Eds.) 2001, *Methods Of Critical Discourse Analysis*. [Elektronisk Resurs], n.p.: London: SAGE.
- Wamukonya, N 2007, 'Solar home system electrification as a viable technology option for Africa's development', *Energy Policy*, 35, pp. 6-14.
- WCED, U., 1987, Our common future. World Commission on Environment and Development, Oxford University Press.
- White, H 2014, 'The measurement of poverty', In: Desai, V, & Potter, R 2014 (Eds.), *The Companion To Development Studies.* [Elektronisk Resurs], n.p.: Abingdon, Oxon; New York: Routledge.
- Wilkins, G 2002, Technology Transfer For Renewable Energy: Overcoming Barriers In Developing Countries, n.p.: London: Earthscan.
- Williams, N, Jaramillo, P, Taneja, J, & Ustun, T 2015, 'Enabling private sector investment in microgrid-based rural electrification in developing countries: A review', *Renewable & Sustainable Energy Reviews*, 52, pp. 1268-1281
- Winther Jørgensen, M, & Phillips, L 2002, *Discourse Analysis As Theory And Method*, n.p.: London: Sage.
- World Bank 1992, World Development Report 1992: Environment and Development, Oxford: Oxford University Pres.
- 2016, Digital Dividends: World Development Report 2016, IBRD/World Bank. Available: http://documents.worldbank.org/curated/en/896971468194972881/pdf/102725-PUB-Replacement-PUBLIC.pdf. Accessed July 2016.

- Wunder, S 2001, 'Poverty Alleviation and Tropical Forests—What Scope for Synergies?', World Development, 29, pp. 1817-1833.
- 2008, 'Payments for environmental services and the poor: Concepts and preliminary evidence', *Environment And Development Economics*, 13, 3, p. 279-297.
- WWF Uganda 2013, Kasese District Renewable Energy Strategy, Online, available at: https://d2ouvy59p0dg6k.cloudfront.net/downloads/kasese_district_renewable_energy_strategy.pdf Accessed January 2013.
- Yin, RK 2009, Case Study Research: Design And Methods, n.p.: London: SAGE, cop.
- Zanchi, G, Frieden, D, Pucker, J, Bird, D, Buchholz, T, & Windhorst, K 2013, Climate benefits from alternative energy uses of biomass plantations in Uganda, Biomass And Bioenergy, 59, p. 128-136.
- Zulu, L, & Richardson, R 2013, 'Charcoal, livelihoods, and poverty reduction: Evidence from sub-Saharan Africa', Energy *For Sustainable Development*, 17, 2, p. 127.

APPENDICES

Appendix A: Interview Guide:

Thesis Title	New sites, actors, identities, language and visions of power		
	A critical analysis of the alternative energy-poverty discourse:		
Research question	A case of Kasese district, Uganda To what extent can alternative energy technologies contribute to alleviation of poverty?		
Other accompanying questions	 How can alternative energy technological solutions alleviate poverty? How is the alternative energy-poverty discourse constructed? How is 'poverty' conceived by actors engaged in alleviating it through advancing alternative energy technological solutions and how do such conceptions affect their stated objectives? What role does the alternative energy-poverty discourse play in (sustainable) Development practices? How can insights from Post-development thinking contribute to a wider understanding of the poverty alleviation practices and the wider (sustainable) Development practice(s) generally? 		

1. Interviews with relevant 153 officials from WWF Uganda country office

Organization information

- ≠ Can you please tell me about your organization?
- ≠ What are the general aspirations/goals of your organization?
- ≠ What do you do to achieve those goals?
- ≠ In your organization, how do you understand poverty and development in general?

The case:

I have learnt that in 2012, your organization, WWF UCO, together with sister Scandinavian country offices "chose" Kasese district as the site for the district-wide clean energy initiative under the name of "Kasese Clean Energy Champion District Initiative".

≠ How and why did you decide to come up with such an initiative?

_

¹⁵³ Relevant to this study

- ≠ Why was Uganda, and Kasese district in particular chosen?
- ≠ What do you aim at achieving with this initiative?
- ≠ Majority of the people in Kasese district, like in many other rural places in Uganda, can be, according to the World Bank monetary definition of poverty, considered poor. How are you implementing the initiative within such a context?
- ≠ Do you as an organization think that poverty, in the economic sense of the word, can be alleviated through provision/distribution/selling of alternative energy technologies to the poor? In either case, why do you think so?
- ≠ Which other organizations/ partners are you working with in the implementation of this initiative?
- ≠ Why those specific organizations?
- ≠ What would you say about your relationship with government, particularly with the Ministry of Energy and Mineral Development?
- ≠ What would you say about the reception of the initiative by the local population?
- ≠ Was there any initial form of resistance from the locals? If yes, why?
- ≠ If the initiative started in 2012, it is now close to four years. How would you evaluate the initiative?
- ≠ Regarding the initiative; is there anything else you would like to tell me?

2. Interviews with relevant officials from access2innovation, Denmark (online interview).

Organization information

- ≠ Can you please tell me about your organization?
- ≠ What are the general aspirations/goals of your organization?
- ≠ What do you do to achieve those goals?
- ≠ In your organization, how do you understand poverty and development in general?

The case:

My current research interest is in practices geared towards poverty alleviation. I have learnt that your organization, together with WWF and partners, is working on a district-wide energy initiative in Uganda called "Kasese Clean Energy Champion District Initiative".

- ≠ How and why did you decide to come up with such an initiative?
- ≠ What do you aim at achieving with this initiative?
- ≠ Why do you think Kasese and Uganda in general was the appropriate site for such a project?
- ≠ What is your major role in the initiative?
- ≠ Majority of the people in the district can be, according to the World Bank monetary definition of poverty, considered poor. I have read about your "commercial approach to poverty reduction". Tell me more about it and how does it work in the Ugandan/Kasese context.

- ≠ Do you as an organization think that poverty, in the economic sense of the word, can be alleviated through provision/distribution/selling of alternative energy technologies to the poor? If yes, why do you think so?
- ≠ Apart from WWF, which other organizations/ partners are you working with in the implementation of this initiative?
- ≠ Why those specific organizations?
- ≠ What would you say about your relationship with government, particularly with the ministry of energy and mineral development?
- ≠ What would you say about the reception of the initiative by the local population?
- ≠ Was there any initial form of resistance from the locals? If yes, why?
- ≠ If the initiative started in 2012, it is now close to four years. How would you evaluate the initiative?
- ≠ Regarding the initiative; is there anything else you would like to tell me?

3. Interviews with relevant Kasese district officials and other local collaborative NGOs (Barefoot Power Uganda Limited and JEEP Uganda).

Organization information

- ≠ Can you please tell me about your organization?
- ≠ What are the general aspirations/goals of your organization?
- ≠ What do you do to achieve those goals?
- ≠ In your organization, how do you understand poverty and development in general?

The case:

My general interest is in practices geared towards poverty alleviation. I have learnt that your organization, together with WWF and partners, is working on a district-wide energy initiative in Uganda called "Kasese Clean Energy Champion District Initiative".

- ≠ How and why did you decide to be part/come up with such an initiative?
- ≠ What is your major role in the initiative?
- ≠ What do you aim at achieving with this initiative?
- ≠ Why do you think Kasese and Uganda in general was the appropriate site for such an initiative?
- ≠ Majority of the people in the district can be, at least according to the World Bank monetary definition of poverty, considered poor. How are you implementing the initiative within such a context?
- ≠ Do you as an organization think that poverty, in the economic sense of the word, can be alleviated through provision/distribution/selling of alternative energy technologies to the poor? If yes, why do you think so?
- ≠ Apart from WWF, which other organizations/ partners are you working with in the implementation of this initiative?
- ≠ Why those specific organizations?
- ≠ Owing to the fact that government is more or less doing related or similar work in the area; what would you say about your relationship with government, particularly with the ministry of energy and mineral development?

- ≠ What would you say about the reception of the initiative by the local population?
- ≠ Was there any initial local form of resistance against the initiative? If yes, why?
- ≠ If the initiative started in 2012, it is now close to four years. How would you evaluate the initiative?
- ≠ Regarding the initiative; is there anything else you would like to tell me?

4. Interviews with representatives of local groups (also involved in the alternative energy programme introduced in the area).

I have learnt, with interest, of a district-wide clean energy initiative implemented in this area by WWF and partners named "Kasese Clean Energy Champion District Initiative", which has been in effect for more or less four years now.

- ≠ What do you know about this initiative?
- ≠ How did it start? Were you consulted before the initiative was implemented?
- ≠ Why do you think WWF and partners chose this district for such an initiative?
- ≠ Would you say that such an initiative was and is a top priority for the people in this area?
- ≠ Are you part of the people who have gained access to energy as a result of the work of this initiative?
- ≠ If yes, how does it work? How did you gain such access?
- ≠ Would you think of yourself as "poor"? In any case, tell me why?
- ≠ Would you say that the above initiative by WWF and partners has improved or worsened your living condition(s)? In either case, why do you think so?
- ≠ What do people in this area say about the initiative in general?
- ≠ Was there any initial form of resistance to the project? If yes, why?
- ≠ Apart from the work of WWF and partners; are there other actors working in this area for similar initiatives?
- ≠ If yes, which are those?
- ≠ In regards to provision of energy, how is government featuring in this area?
- ≠ How would you evaluate the initiative by WWF and partners?
- ≠ Regarding the above initiative; is there anything else you would like to tell me?

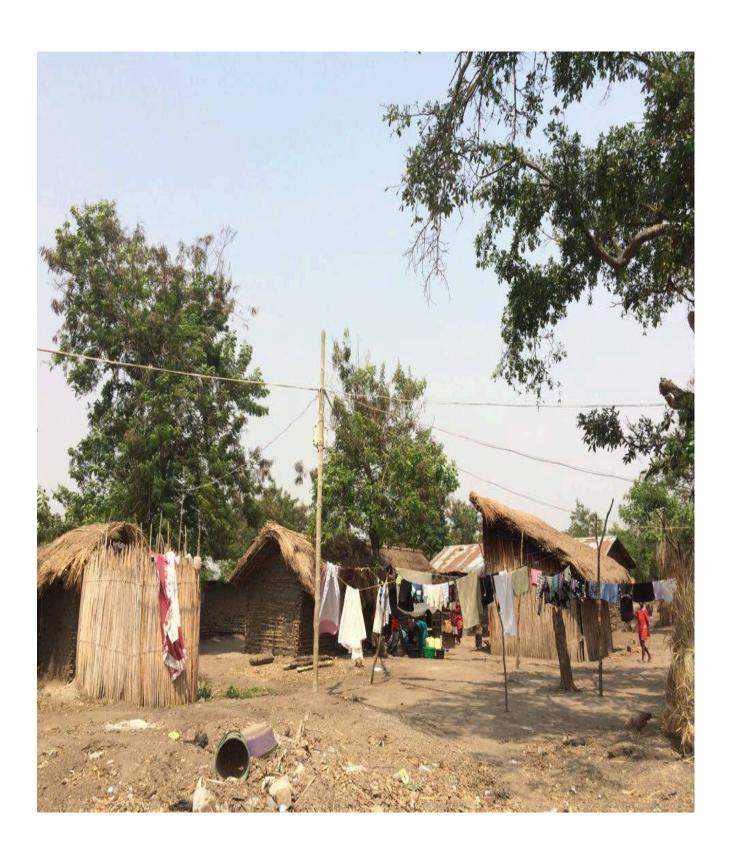
APPENDIX B: List of interviewees

- **Int.01.** Manager, The Kasese Champion District initiative, WWF Field Office, Kasese. Interviewed on February 08, 2016
- **Int.02.** CEO, Conservation and development Agency (CODEA), Kasese. Interviewed on February 10, 2016.
- Int.03. Deputy Town Clerk, Kasese Municipality, Kasese. Interviewed on February 11, 2016.
- **Int.04**. Chairperson Kayanja Village, also Director of Kayanzi Community Solar Energy Organization, Kayanja, Kasese. Interviewed February 11, 2016.
- Int.05. Two kayanja village residents, Kayanja, Kasese. Interviewed February 11, 2016.
- Int.06. Kayanja village resident, Kayanja, Kasese. Interviewed February 11, 2016
- **Int.07.** Director, Kasese District Network (KADNET), Kasese. Interviewed on February 12, 2016.
- Int.08. Assistant Director, Caritas Kasese, Kasese. Interviewed on February 12, 2016.
- Int 09. Natural Resource Officer, Kasese District, Kasese. Interviewed February 12, 2016.
- **Int.10.** Director, Prime energy and environmental savers, Nansana, Kampala. Interviewed February 24, 2016.
- **Int.11.** Former CEO, systems teknik, Remegy Energy, Denmark [Skype Interview]. Interviewed on March 29, 2016
- **Int.12.** Chief Project Manager, Energy City Frederikshavn, Denmark [Skype Interview]. Interviewed on March 16, 2016

Appendix C: Systems teknik (Denmark) powered Kayanja Solar Mini-grid power installation seen from a distance. All photos by researcher.



Appendix D: Solar connection/distribution lines passing through homes of residents of Kayanja Village, Kasese. All photos by researcher.





Ugandan mayor: My district will be 100% renewable by 2020 | Global Development P... Page 1 of 2



Ugandan mayor: My district will be 100% renewable by 2020

The mayor of Kasese's ambitious plan for his region's renewables programme aims to improve living standards and public health

Godfrey Baluku Kime in Kasese

Tuesday 20 October 2015 10.43 BST

y desire to set a 100% renewable by 2020 goal was strongly motivated by the alarming climate-induced degradation of the snowcapped Rwenzori mountains, from which the communities here derive their livelihood, water supply and identity. The people of the Rwenzori get their name from the snow. Without the snow, our name will be no more. Also, I want to boost energy access in the region to improve living standards, increase public health and bolster the local economy.

The 100% renewables programme was launched in 2012 with the aim to transform the energy supply in the city of Kasese and the surrounding district. I want to bring access to clean energy services for all domestic, productive and social needs in both rural and urban areas by 2020. Only 7.6% of the 134,000 households in the district have access to the nation's electricity grid so we are working on adopting a variety of renewable sources including biomass, solar, geothermal and micro-hydroelectric technologies.

Renewable energy access has become a key deliverable for all government-funded projects and institutions – including schools, health centres, markets and other public infrastructure. The district council has passed a policy providing tax breaks for all renewable-energy-related businesses. The council is also providing traineeships for the installation, maintenance and distribution of renewable energy technologies. We are also working with universities, businesses and NGOs. A collaboration between WWF and Barefoot Power Uganda is allowing local businesses provide loans for small-scale solar in mountain villages.

The national government, civil society organisations and regional leaders are supporting our 100% renewable energy vision for Kasese. Three years into the project, tens of thousands of people have access to energy for the first time. Today renewables are estimated to be supplying 26.8% of the Kasese district with energy.

In the past, 97% of the local population relied on charcoal and firewood for cooking which caused noxious fumes leading to health issues, particularly for women. Similarly, 85% of locals relied on kerosene for indoor lighting, which is an expensive and inefficient fuel and imposes a significant financial burden on poorer families. Solar for lighting and biogas for cooking has replaced the traditional three-stone

https://www.theguardian.com/global-development-professionals-network/2015/oct/20... 2016-09-23

Ugandan mayor: My district will be 100% renewable by 2020 | Global Development P... Page 2 of 2

method of cooking - reducing indoor pollution. At the same time the deployment of relatively cheap domestic solar systems is providing electricity for many of the poor, freeing up money for food, clothing and education.

Biogas systems and energy saving stoves are improving community relations. Conflicts as a result of groups searching for firewood have reduced, while the time spent to collect firewood is being used for other, more productive work.

The increasing electrification has meant that residents of Kasese have the power to run their own radio and TV sets for the first time. Important lines of telecommunication are opening up and becoming increasingly reliable due to the rollout of solar phone charging facilities and solar-run computers with internet access. Residents are increasingly able to access new forms of entertainment, each other and the outside world.

There are new jobs available for locals as the renewable energy sector expands in the region. The number of businesses in our green economy has increased from from 5 to 55 since 2012 – at least 1,650 people have been trained in the process. The businesses sell solar equipment, construct solar hubs, build biogas systems, improve cook stoves and deliver mini-hydro projects. The tourist industry has also enjoyed growth, as our camps and lodges get access to electricity we are able to attract more visitors.

In order to achieve the vision of 100% renewable by 2020, we need sustainable funding of renewable energy technologies. Sustainable financial support for the programme and finance mechanisms for individual households - especially those living on less than \$1 a day - need to be ensured over the years in order for the 100% renewable vision to be realised.

Kasese's journey towards 100% renewable energy by 2020 is happening right now. This bold project is empowering communities and improving livelihoods. It is setting a great example for other districts and municipalities to follow in Africa and in the rest of the world.

Godfrey Baluku Kime is mayor of Kasese, Uganda

Join our community of development professionals and humanitarians. Follow @GuardianGDP on Twitter. Join the conversation with the hashtag #EnergyAccess.

More sponsored features

Topics

Solar power Energy Renewable energy Uganda Africa

Save for later Article saved Reuse this content

https://www.theguardian.com/global-development-professionals-network/2015/oct/20... 2016-09-23

Appendix F: Observer Uganda (http://www.observer.ug) article: "Kasese takes lead on clean energy campaign".

Kasese takes lead on clean energy campaign

Page 1 of 3



Kasese takes lead on clean energy campaign

Written by Moses Mugalu

Created: 27 August 2013

Apollo Kinanga, a local council chairman in Katamira, a remote Rwenzori mountain village in Kasese, only dreamt of sleeping under a well lit roof.

The only form of lighting available to his parents, during his childhood, was a tadooba (crafted tin lamp) powered by kerosene. They used to light it for only a few hours after dusk. He later got one for his house.

But in February this year, Kinanga acquired a four-bulb solar lighting system, which he says has completely transformed his family lifestyle.

"My children's academic performance has improved because they revise well under solar lighting. I have also been spared the expenses on kerosene and charging my phone," says Kinanga, whose village is not far from the DR Congo border.

Kinanga, who is a coffee farmer and part-time mason, used to spend Shs 500 on buying kerosene for the tadooba every day. Ever since solar cells were installed, he saves Shs 15,000 of his monthly income, which ranges between Shs 50,000 and Shs 80,000. He says he saves another Shs 4,000 previously spent on recharging his cell phone at a nearby outlet in Bwera town.

His six children have transformed into some of the best performers in class at Muruseghe primary school, 2.5km away.

"They used to be in 20th positions but now they are among the top eight," Kinanga adds with a smile. Kinanga is relieved that his homestead has reduced the harmful emissions from the tadooba.

Recently, he moved a step further by installing an energy-saving cooking stove, replacing the traditional three-stone fireplace in his kitchen. The mud-built stove uses less firewood or charcoal and emits even less smoke. Kinanga's wife, Eva, is delighted with the new cooking facility.

"I no longer suffer from watery eyes because of the heavy smoke, saucepans are cleaner and the food gets ready faster compared to the past," she says.

The Kinangas illustrate the clean energy model which is spreading in Kasese. In Katamira alone, 20 households have acquired solar systems and 300 installed energy saving stoves in their kitchens. Thousands of families in villages across Ihandiro and Karusandara sub counties, installed solar cells and energy efficient stoves, in the last six months.

Its advocates emphasise that with more use of clean cooking and solar lighting technologies, Uganda could limit the environmental degradation and climate change effects. For instance, an independent research conducted in Kasese district last year, found that if one energy-saving stove is used consistently, up to three trees are saved from cutting, every year.

http://observer.ug/features-sp-2084439083/57-feature/27190-kasese-takes-lead-on-cle... 2016-09-23

Researchers say that emissions from the traditional three-stone cooking fireplaces are responsible for a billion metric tons of carbon produced every year in the country. According to the World Health Organisation (WHO) reports on indoor air pollution and household energy, Uganda experiences an estimated 19,700 deaths every year, or 54 deaths every day, caused by indoor air pollution from three-stone cooking fireplaces and tadoobas. Rural women and their children constitute the majority of the victims.

In Uganda, an estimated five million households still cook their food on the hearth, which confirms that 95 per cent of Ugandans use firewood (or charcoal) as their main source of energy. The statistics are not any better on lighting; only 17 per cent of Ugandans access electricity and the rest (83 per cent) use kerosene in improved lamps commonly known as tadoobas.

On average, each household spends Shs 600 on kerosene per night, according to a recent study. As champions of promoting sustainable clean energy use and reducing carbon emissions, the World Wildlife Fund (WWF) have taken on the initiative to link civil society, government policymakers and local district authorities, in a bid to encourage low end people embrace technologies that reduce pollution.

"We want sustainability and use of clean energy technologies so that humans live in harmony with nature, says Eddie Oketcho, communications manager at WWF.

Accordingly, WWF has established working partnerships with local community based organisations (CBOs); Friends of Nature and AFODE, to avail affordable solar lighting systems and cooking stoves to low income farmers in Kasese district.

Solar systems and cooking stoves are expensive but the role of CBOs has come in handy on that aspect. As many as 6,000 households in Ihandiro and Karusandara sub counties have accessed solar lighting and no longer cook on the hearth. Through CBOs, residents access credit facilities to pay for solar systems and stoves of their preferred choice.

A two-bulb lighting solar system costs Shs 240,000, with a down payment of Shs 100,000. A four-bulb lighting solar system costs Shs 450,000 (requiring a down payment of Shs 150,000). The rest is paid in installments over six months, usually after agreements undertaken with the CBOs. If acquired on the competitive market, the aforesaid solar systems go for a minimum cost of Shs 750,000.

Energy saving cooking stoves cost between Shs 40,000 and Shs 100,000 but in Kasese, farmers buy them at a minimum price of Shs 19,000 through the CBOs, which accept payment even in installments.

According to Friends of Nature CEO Paul Kamalha, over 2800 households have managed to pay for the solar cells and stoves with support from revolving saving schemes (SACCOs). Once an agreed down payment is made, the facilities (solar panels or stoves) are installed and balances are paid over six months period, Kamalha explains.

Last year, WWF chose Kasese as a champion district in its pilot phase of the campaign to encourage use of clean energy resources. Job Mutyaba, the energy manager at WWF, explains that Kasese fits the champion status because of high environmental degradation rates in the district.

Champion district

It is worth noting that 60 per cent of Kasese's mountainous land is protected area, which includes national parks, forest reserves, lakes, rivers and government agricultural research institutions. That means there is limited land for human activities in a district with an estimated population of 700, 000 people.

http://observer.ug/features-sp-2084439083/57-feature/27190-kasese-takes-lead-on-cle... 2016-09-23

Officials are also optimistic their campaign will soon gain more momentum when extra funding, channelled through CBOs from the International Labour Organisation (ILO), is sourced. According to Mutyaba, ILO recently committed to give Shs 42m towards briquette charcoal making.

Mutyaba explains models of solar distribution and use of energy saving stoves applied in Kasese will soon be spread to other parts of the country.

"The success of measures being tested here is incredible so far and we're optimistic they'll work elsewhere," Mutyaba says.

To achieve clean energy use at household levels, Mutyaba notes that districts should offer tax exemptions for solar dealers, encourage public/private investments in energy sector and making it compulsory for schools to acquire energy saving stoves.

Schools rank highest among big firewood consumers in the country.

"If every district in the country ordered its schools to use energy saving stoves, thousands of forests would be spared," Mutyaba argues.

Consequently, Kasese district environment officer Augustine Kooli says they have already resolved to license only new schools with a commitment to cook on energy saving stoves.

mugalu@observer.ug (mailto:mugalu@observer.ug)



This content has been locked. You can no longer post any comment.

Appendix G: Extract from Access to Innovation documentary: "green business in East Africa". Available at: https://www.youtube.com/watch?v=ilHrQuoaA8U

Extract from a transcribed Access to Innovation documentary Access to innovation Documentary, 2014, 'green energy business in East Africa'. Brodersen Kommunikation. Available: https://www.youtube.com/watch?v=jlHrQuoaA8U Accessed June 24, 2016.

East Africa is among the fastest growing Commercial markets today, with yearly growth rates of up to 7 %. But insufficient and heavily polluting energy supply is stunting the growth in the entire region, and creating an environmental hazard instead of a booming economy.

Danish companies are World famous for being experts on green energy solutions. And even though there is a long way from the frosty Scandinavia, to the warm heart of Africa; Danish expertise and innovative solutions are in demand on the equator.

The Danish green-tech companies, CO2 Light and Danish Solar Heat, are on the verge of making it big in Eastern Africa. In 2013; they established the Company, Solar Power Africa, and have installed a demonstration solar Power system on the Kampala Industrial Plant Roofings, to prove that solar panels is a right choice for bigger scale solutions.

However, big scale solar parks aimed at industries and large cities are not an option for the 93% of the population that has no grid connection. In the village of Budaka, in the Eastern part of Uganda, chicken farmers in need of energy for the incubators found the right solutions, in a Danish solar panel system, that has allowed them to double their production 9 times over, creating immediate profits locally, and sparking an instant business model.

Gaining access to consumers in remote areas in Africa is not an easy task if you don't have any knowledge of the local network. In Kasese, WWF has initiated the green energy champion district, a Project that involves a wide range of local, national, and international partners. One of them is Access to Innovation - a Danish network organization that covers NGOs, University researchers, and private companies, in order to develop sustainable solutions.

By working in partnerships, new business models and financial structures evolve that involves local partners, and Danish companies as well as local government, and create a whole new platform, for bringing sustainable energy to Africa, in a commercially viable way, creating jobs in Denmark, as well as in Africa.

The Energy market in East Africa is ready and waiting for Danish Green Techs that aims at both large scale grid solutions as well as smaller off-grid systems. But companies should have a keen eye on basing their market approach on business models that fit into an African context. Take your time, to choose the right partners and the right network. And use the Danish Embassies, as well as organizations like A2i, that are designed to help you to build the right platform for your future business.

Appendix H: Tables.

Table 01. Institutional actors' discourses on poverty

Discourse	Int. no.	Utterances
The needs discourse	01	-"Somebody being able to afford the basic necessities." -"Because at the end of the day, the wellbeing should all be defined if those poverty indicators should be all about does he has food? Does she have shelter, does she have peace?" -"at the end of the day, you look at issues around food security, you look at issues around gender; if energy tackles these two issues, then this is where development starts from." (Int.01)
	11	-If you accept the approach that people need food, they need cloths; they need energy to develop on their own basis: then you can have poverty of energy. That's something we are trying to address." -"To me poverty has to do with having those basic needs addressed." (Int.11)
	08	-"You measure poverty in terms of, like in a home, you see these people; can they really manage a meal?" -"You check in other sectors; you find that there are even young ones who are even malnourished. You see if you are there at 10 am, you find children of like 10 years; they can't even go to school. You ask them; why don't you go to school? They tell you that "we have no books". You ask them for how much? They say 1000shs!" (Int.08)
	02	-"people who cannot afford the basic needs." (Int.02)
(Neo-liberal)	10	"they are low income earners." (Int.10)
Economic discourse	02	"people who cannot be able to invest." (Int.02)
Livelihood discourse	07	"We understand [poverty] in a way of resources, and livelihoods. It is limitations in access to services, and the quality of life of people. It is uplifting the standard of people from one level to another, using their own effort, as opposed to waiting to be given. Because it is not sustainable. So, it is empowering the people, to get the necessary skills, to get out of a bad situation to a better one." (Int.07)
PES discourse		"if we leave these guys, these guys will be able to access the forest to ensure that their livelihood is met, issues around poverty levels, population status, were all issues that we looked at." (Int.01)

Table 02: Institutional actors' discourses how renewable energies can alleviate poverty

Discourse	Interviewee no.	Utterances
Economic discourse	01	-"So, in ensuring that you have renewable energy improved cookstoves, at the end of the day, you have saved the time this woman is going to use to fetch this firewood. You have saved the amount of firewood to be utilized. You have also saved the little income they would have used if they were the ones buying this firewood. And the overall effect [is that] you have saved the number of trees that would have been cut" (Int.01)
		-"every family had to spend some money in order to go and buy some paraffin, to ensure that there is light at home." (Int.01)
		-"they will also build the capacity of these women in selling and installation of these cookstoves, and also in installation of solar kits or even in maintenance of these solar kits." (Int.01)
		-"if you ensure that a community has access to energy, then you are freeing that drudgery time for collecting firewood, for looking for paraffin from the nearest trading center, and this person's mind is freed to thinking on how do I engage in something else to give me some amount of money" (Int.01)
	10	"But obviously for the villagers, we wanted to give them skills, which skills to make stoves for themselves, to make stoves for others, so that they can also earn a living." (Int.10)
		"Then there are those who have no cash at all, but they are able to get stoves. Because we give them a chance. That if you look for buyers; now your skill is to market. You market our product, on top of the ten pieces you have marketed, the eleventh is free, it is yours. You can either sell it, or you can take it as your stove." (Int.10)
		-"Our stove gives them chance to involve into business. Because the average money our artisans get from the stove is five thousand [Uganda] shillings. And in the week the artisan makes four stoves a day. That means someone who is energetic can even make ten stoves a day. So, that difference from nothing to something. And during the training we normally tell them: don't wake up in the morning to go and start constructing stoves. First go to the garden, after garden then to the stove making. So that you do not use that money you have earned from stove business to start buying food. You use it to do other development things like now saving for solar, saving for iron sheets, school fees, and such things." (Int.10)
	07	-"we reduce pollution, our people save money, they save the environment, because they will not be cutting as many trees as they are cutting now." (Int.07).
	11	"As a person, what does it take you to develop your own life and your own quality of living? You need access to stable energy. Part of fighting poverty all those aspects is that you need access to stable energy. Businesses, incomes, skills, etc. for young people." (Int.11)
		-"The approach by systems teknik and REMEGY was commercial." -"There is a lot of need for stable access to energy and a lot of room for improving the standards of people and fighting poverty and developing the skills of individuals in Africa." (Int.11).
		-"Don't you think if we moved people from one hundred eighty five thousand

09

shillings annually to forty thousand shillings annually, then they can make a saving? This saving they can use for other initiatives." (Int.09).

-"...we are moving people from 7% efficiency to between 35-50% efficiency in energy saving. It has an implication on the pocket. The per capita consumption of charcoal will decrease. If you have saving, then you can boast that you are moving out of poverty." (Int.09).

Livelihood discourse

01

"...if the household is able to access clean cooking and clean lighting; then we believe that that particular person, his or her livelihood is going to be improved." (Int.01).

"The sixth one [pillar of the champion district initiative] which we did include then was also how do we enhance livelihoods? Livelihood enhancement through renewable energy access." (Int.01).

Gender discourse 01

ntal

discourse

Environneme

"...guess who is harvesting these fuel woods: it is either a woman, the mother, or is either a girl child, a boy child who is supposed to go to school, who is in the forest harvesting. So, in ensuring that you have renewable energy improved cookstoves, at the end of the day, you have saved the time this woman is going to use to fetch this firewood. You have saved the amount of firewood to be utilized. You have also saved the little income they would have used if they were the ones buying this firewood. And the overall effect of you have saved the number of trees that would have been cut, because, in order to collect this firewood." (Int.01).

-"...the intervention of improved cookstoves means that they reduce the amount of fuel to be used, and at the same time these fuels would be harvested from the conservation area..." (Int.01)

Medical/Heal 01 th discourse

"...looking at the health side of it, you find that there is a lot of in-door air pollution in this kitchen. And this already provides another issue of ailment in terms of respiratory diseases to the women, to the children around there. This kitchen on a three stone fire, there is a woman who has a baby; issues around fire safety within the kitchen become an issue. So by bringing such an intervention, you have actually saved both the environment, the social and the economic aspect of it. So in so doing, you are actually enhancing the livelihood of this person." (Int.01).

"When people have clean lighting, clean cooking; then it means they will

have less diseases. Whether some respiratory diseases that come out of a poor environment, and so, it means they will save money, and instead of spending it on education, they will spend it in improving their livelihood. So the people will come out of poverty in that way. And for those who are doing it as business. It's a good deal." (Int.07).

07

"...if you went to the Medical department and asked them which are the most prevalent infections around, respiratory infections are one of the key. Reason, is the time we spend in [the kitchen]." (Int.09).

"...if you can provide them with energy cook stoves, energy saving cook stoves as an alternative; so that they can run away from the three-stone fireplaces. Two; if they can move for solar as a source of energy for lighting in the homes; then they can move away from the tadooba...then also run away from those respiratory infections." (Int.09).

"Culture is pursued by people. Strong people. Now if this three-stone fireplace has an influence on their health; whom do you want to pursue cultural issues? The healthy person or the unhealthy one? You see that kind of argument." (Int.09)

Education

86

09

discourse 10	"We train and we think it is part of the sustainable part of the project: if
	people have got a skill, [it] will never come out of their brain."(Int.10).