



**CAPABILITIES AND THE CLASH
OF CONTEXTS
AN EXPLORATION INTO THE
SKILLS DEVELOPMENT
COMPONENT OF THE KUYASA
CLEAN DEVELOPMENT
MECHANISM PROJECT IN
SOUTH AFRICA**

TIPS PAPER: PEET DU PLOOY SMALL GRANT TOWARDS RESEARCH IN GREEN ECONOMY AND CLIMATE CHANGE

28 FEBRUARY 2015

AUTHOR:

ANNA JAMES
M.Sc CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT,
UNIVERSITY OF CAPE TOWN

SUPERVISOR:

HOLLE WLOKAS
PREVIOUSLY RESEARCHER AT THE ENERGY RESEARCH CENTRE,
UNIVERSITY OF CAPE TOWN

Abstract

Policy interventions at national and international scales are driving efforts to simultaneously reduce greenhouse gas emissions and provide sustainable socio-economic improvements. The Clean Development Mechanism (CDM) is one such policy instrument implemented through the Kyoto Protocol under the international climate change regime. Questions remain particularly around how socio-economic development can be achieved and, more importantly, how these policy approaches play out on the ground in the lives of those they affect. This paper presents a case study, focusing on the impact of a skills development component of the Kuyasa CDM project, in Cape Town, South Africa. It investigates two specific aspects of the project, highlighting challenges for CDM projects to achieve their desired socio-economic outcomes. Findings indicate that formal accreditation is not, in all cases, found to be beneficial to the lives of those living in Kuyasa. At the same time, many benefits are drawn from the experience of productive work but these are not acknowledged. Implications for expectation management and more appropriate interventions are outlined, including understanding the multi-dimensional impact of the experience of training and employment. Finally, reflections are provided on how CDM projects could contribute to effective skills development.

Acknowledgements

I would like to thank my research participants who have played a crucial role in producing this knowledge with their time and willingness to share their experiences of the time working on the Kuyasa CDM project. I would like to acknowledge TIPS for providing financial support for working on this paper, through their Peet du Plooy Small Grant for Sustainability, as well as Gaylor Montmasson-Clair, Laila Smith and Georgina Ryan for their comments and insights. Finally, I would like to thank Holle Wlokas and the Energy Research Centre for providing me with supervision throughout this research process.

Table of Contents

Abstract	2
Acknowledgements	3
Table of Contents	4
List of acronyms	5
1. Introduction	6
2. The Clean Development Mechanism and its link to pro-poor development	7
3. Skills development as a mechanism for development	8
3.1 Background on skills development in South Africa	9
4. The critical lens of capabilities	9
4.1 Application of the capabilities approach in this study	11
5. Case study description: Kuyasa, the Kuyasa Clean Development Mechanism project and its skills development component	11
6. Methods	12
7. Findings and discussion	13
7.1 Formal accreditation	13
7.2 Skills and capabilities in Kuyasa	15
7.3 Unintended, unreported benefits	15
7.4 The experience of employment: the multiple dimensions of work	16
8. Concluding discussion	17
9. References	20

List of acronyms

CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CETA	Construction Education and Training Authority
DWEA	Department of Water and Environmental Affairs
EPWP	Expanded Public Works Program
FET	Further Education and Training
GHG	Greenhouse Gas
RDP	Reconstruction and Development Program
UNFCCC	United Nations Framework Convention on Climate Change
VET	Vocational Education and Training
TVET	Technical and vocational education and training

1. Introduction

Social development concerns are increasingly understood as interrelated with climate change. There is a large literature on vulnerability in relation to climate change in which those in vulnerable living situations will be disproportionately affected by the impacts of climate change and it is therefore essential that poverty and vulnerability are addressed in conjunction with the efforts to combat climate change through the reduction of greenhouse gas (GHG) emissions (Casillas & Kammen, 2012). Accordingly, global climate change negotiations generally include a considerable focus on reducing the vulnerability of the poor (Crowe, 2013). In this context, the Clean Development Mechanism (CDM) was introduced in 1997 under the Kyoto Protocol. It was developed with the aim to align the developmental needs of developing countries and industrialised countries' responsibility to mitigate GHG emissions (Disch, 2010). To these ends, the CDM has the dual goal of reducing GHG emissions and encouraging sustainable development in the host country where projects are implemented (Crowe, 2013).

Yet, there is uncertainty around how the momentum built around climate change and development at the international level plays out in national and local contexts. For example, South Africa has conceptualised a new green economy with job creation as an intended outcome (DEA, 2011). How job creation will come about, and whether the necessary skills are available is yet to be determined (Aroun, 2012). Similarly, despite the successes of the CDM in the areas of technology transfer, institutional capacity building and a contribution to low-carbon development, evaluations of CDM projects to date suggested that local sustainable development remains a weak point (Crowe, 2013, p. 59).

Skills development can contribute to at least two dimensions of sustainable development in the contexts of CDM projects. Firstly, it has the potential to contribute to the capability for employment and job creation and therefore improve well-being. Additionally, skills are required to expand the development of clean energy (Thorne, 2008). However, the realisation of these contributions depends upon the use of skills development to alleviate poverty, support economies and transition to practices with lower environmental impacts (Maclean, 2009, p. xvii). In specifically focusing on the link between skills development and social development, this paper uses an understanding of skills development adopted by Palmer (2007, p. 399) which includes “... *education and training, occurring in formal, non-formal and on-the-job settings, which enables individuals...to become fully and productively engaged in decent livelihoods and to have the capacity to adapt their skills to meet the changing demands and opportunities of the economy and labour market.*”

This paper presents a case study of the skills development experience at the Kuyasa CDM project which involved upgrading 2 309 formal government houses (developed under the Reconstruction and Development Programme (RDP¹)) with energy-efficient technology. The technology installed was found to have significant benefits with respect to monetary savings and vulnerability reduction in the household (Wlokas, 2011). It was also the first CDM project in existence to receive the Gold Standard award.² This investigation into skills development is relevant given South Africa's interests in mitigation while simultaneously addressing widespread unemployment and poverty challenges in the

¹ The RDP, an overarching policy framework of the first democratically-elected government in South Africa in 1994, included a subsidy for a basic house with the potential for upgrading (Bradlow et al., 2011, p. 269). The expectation for upgrading has not been met, partially due to the lack of technical support. The low-cost housing, which now exists as a result of this policy, has been criticised as ineffective and not people-centred (Huchzermeyer, 2001, p. 306).

² This award is given to projects that are mitigating GHG emissions as well as contributing local economic, environmental and social well-being (Nussbaumer, 2009, p. 93).

country. In 2008, 3.9 million people were classified as unemployed and this rose to 4.6 million in the second quarter of 2013 (Statistics South Africa, 2013, p. xii). The skills development component of the Kuyasa CDM project presents an interesting bottom-up case study for how unemployment, poverty and climate change might be addressed together in the South African context.

The research question is: how have skills development impacted positively on the lives of those employed on the Kuyasa CDM project, if at all? This paper aims to explore the impacts of skills development which cannot be understood simply in terms of average household or income. What follows is an exploration, drawing on the capabilities approach, of a complex, historically-grounded, yet globalised community struggling to engage in ‘decent livelihoods’, and how a project with intended developmental outcomes might impact on this.

The paper proceeds as follows. Firstly, the literature on CDM projects and skills development will be contextualised from the international context to the South African situation. Secondly, the framework of capabilities will be explained in general as it is used in this study. Thirdly, the case study context will be presented. The general findings and discussion follow, focusing on two aspects of the Kuyasa CDM project skills development component: the reception of a certification and the experience of being employed on the project. The final section concludes and reflects upon the delivery of skills development in this form.

2. The Clean Development Mechanism and its link to pro-poor development

The CDM has the dual goal of contributing to sustainable development and reducing GHG emissions (Sutter & Parreño, 2007, p. 75). As such, it theoretically meets the goals of developed countries to reduce GHG emissions as well as of developing countries to further development (Ellis et al., 2007). However, both goals have not been met to an equal extent. The CDM has had success, for example, in directing private investment towards sustainable development efforts with existing CDM projects in 2007 generating reductions to the value of USD7.4 billion (Disch, 2010, p. 51). However, research has found that CDM projects are generally weak in achieving their goal of sustainable development (Nussbaumer, 2009; Olsen & Fenhann, 2008; Sutter & Parreño, 2007). A central reason for their failure to achieve local sustainable development lies in the market-based incentive structure of the CDM (Nussbaumer, 2009, p. 99). This is specifically because the market-based incentive to reduce GHG emissions overrides the non-market-based and hard-to-define goal of sustainable development (Disch, 2010, p. 51; Olsen & Fenhann, 2008, p. 2820). For example, abatement cost curves used to analyse mitigation efforts focus on quantifying cost and carbon metrics with little effort to quantify stakeholder impacts (Casillas & Kammen, 2012).

The CDM does not have specific requirements to deliver pro-poor benefits, however as Crowe (2013) outlines, the goal of sustainable development is inclusive of poverty alleviation. Furthermore, analyses of specific projects have shown that the CDM has the potential for pro-poor benefits (Crowe, 2013). It follows that the failure to achieve broad-based sustainable development undermines potential contributions to pro-poor outcomes. As poverty presents a global challenge that is parallel to that of climate change, there needs to be a move towards addressing the imbalances that arise in mechanisms intended to address poverty and climate change simultaneously.

Employment is examined as a component of sustainable development in the literature on CDM evaluation (Olsen & Fenhann, 2008; Subbarao & Lloyd, 2011; Sutter & Parreño, 2007). However, this evaluation refers to employment during the CDM project (Sutter & Parreño, 2007, p. 79) and does not

necessarily consider long-term employment nor how that employment relates to local sustainable development (Olsen & Fenhann, 2008, p. 2822). Additionally, the above mentioned studies are quantitative and assess predetermined indicators which are standardised internationally (Crowe, 2013) and therefore neglect local nuance and complexity. Thus, while acknowledged as important, there is limited understanding of how employment associated with CDM projects contributes to local sustainable development.

Although South Africa is the country with the highest number of registered CDM projects in Africa, it is host to few compared to the rest of the world. In 2012, China had 1 241 registered CDM projects while South Africa had only 19 (Fay et al., 2012). As of 2014, there are 80 projects registered, however only 12 have received certified emission reduction (CERs) (Department of Energy, n.d.). A finding of Fay et al. (2012, p. 48) is that the significant investment required before the CDM project generates CERs has to be sourced within the developing country and is rarely paid off by the sale of CERs on the completion of the project. Thus, while benefits might be gained from South Africa's local investment in CDM projects, the financial incentive is arguably weak at this time. At this rate and scale, the CDM has had limited impact on South African development.

3. Skills development as a mechanism for development

Skills development is globally considered as a mechanism for development. The notion that skills and education can lead to jobs and reduce large-scale unemployment challenges is spread throughout the world (McGrath, 2012, p. 624). However, whether the development of skills on its own can contribute to development in developing countries is under increasing scrutiny. McGrath (2012, p. 624) identifies this assumed, automatic link between skills and jobs as a 'productivist assumption'. This assumption aligns with an approach which considers economic development as the main goal rather than human- or socially-orientated development. The trends that have arisen out of this way of thinking include the replacement of welfare provision with the provision of skills (McGrath & Akoojee, 2009). The main idea is that rather than providing for the poor, the poor become equipped to participate in the economy.

There are a number of problems with the adoption of skills development policy that is orientated towards the needs of the economy while replacing other forms of support. Firstly, there is a question around whether there will be jobs for those who are skilled. King (2009) points out that, despite significant growth in a number of African economies, there has not been a proportional growth in poverty alleviation or job creation. Hlatshwayo (2014) shows that, in the case of the steel industry modernising towards a state of higher profits, the provision of skills needed in this industry resulted in increased unemployment.

Secondly, it focuses on the provision of individual skill and distracts from addressing other structural barriers to poverty alleviation and development. Palmer (2007) notes that skills will not empower when an economic system disfavours the poor. Allais (2012) points out that, in economies dominated by the market, there is a lack of investment into public education which results in weak skills development institutions. The result is the reproduction of inequality where the wealthy are able to pay for a higher standard of education and the poor are left with a low level of skill.

Thus, while skills development is an important idea, the provision of skills has to be applied sensitively and in a way that is appropriate to the national and local context. Towards this end, it is proposed that skills development should be situated within a broader consideration of human development rather than just responding to the economy (Mcgrath, 2012, p. 625). This paper

conceptualises human development through the framework of capabilities, which will be expanded upon below.

3.1 Background on skills development in South Africa

Skills development was proposed under Thabo Mbeki's presidency (1999-2008) as the bridge between marginalisation and participation in the upper class section of society (McGrath & Akoojee, 2009). The National Skills Development Strategy was set up in 1997 and, in order to respond to the demands of the economy, was designed to be regulated by the market (Allais, 2012, p. 633). This reflects a policy that is aligned with the automatic assumption described above. The South African Government has acknowledged that the country is short on skills and that support should be given to people with low skills living in marginalised areas (Aroun, 2012, p. 140). However, it is important to ask *how* specifically those skills are overcoming the complexities of addressing the poverty experienced in the country.

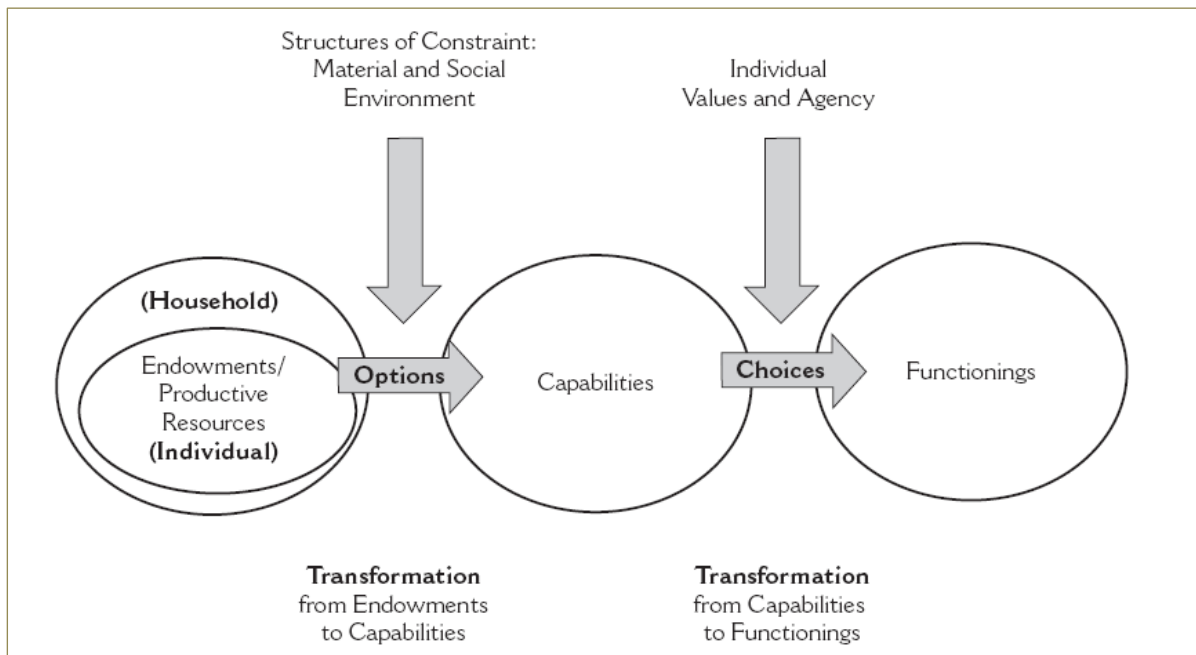
In South Africa, one method of providing skills development is to contribute to the needs of the economy through the Expanded Public Works Programme (EPWP). This programme employs people and provides on-the-job training as well as a small portion of formal training with the aim of providing skills to meet the demand of skilled labour. The success of these projects has been considered by McCord (2005) through econometric analysis of job creation and post-project employment in South Africa. Her findings show that such projects, through their short-term formal and on-the-job training and temporary work experience are not successful in equipping individuals for meeting the national demand for skilled labour, but at best result in substitution in the over-supplied unskilled labour pool. The focus of McCord's research has been on job creation and employment specifically. While illustrating the shortfalls of employment-directed skills development, it does not necessarily challenge the discourse of skills development being orientated towards the economy. A complementary critique would be to consider these projects for their contribution to holistic human development, perhaps in terms of the quality of employment for the beneficiaries.

As the link between skills development, job creation and development more broadly is recognised in the literature as tenuous, there is value in exploring the outcomes of a skills development effort. This is especially in a context of poverty challenges, such as in Kuyasa, in the Khayelitsha township of Cape Town, South Africa. This paper addresses this gap in the literature and calls for a deeper understanding of how skills development might be linked to well-being and development on a household or personal level where economic development is included but not the focus. For this, the paper adopts the analytical lens of capabilities.

4. The critical lens of capabilities

The capabilities approach was first introduced by Amartya Sen (1980). Two central concepts in this approach are capabilities (what someone is able to do) and functionings (the means by which someone chooses to live). Capabilities are the “freedoms or valuable options from which one can choose” (Robeyns, 2005a, p. 95). They can also be seen as opportunities (DeJaeghere & Baxter, 2014, p. 71). As seen in Figure 1, capabilities are determined by contextual constraints and endowments or resources. The move from capabilities to functionings is in turn governed by values.

Figure 1: The capabilities framework



Source: DeJaeghere and Baxter 2014

As a response to the criticisms of one dimensional poverty measures, such as household income, this approach focuses on the opportunities an individual has through which to achieve a way of living s/he considers valuable (Robeyns, 2006, p. 351). The capabilities frame has several significant advantages for considering human development. Two important aspects include highlighting the importance of context and individual values (DeJaeghere & Baxter, 2014). Through this, the capabilities approach attempts to guard against imposing normative ideas of development. In doing so, it acknowledges that poverty or development is a function of multiple dimensions, such as resources, context and individual values (Powell, 2012, p. 464; Robeyns, 2005a, p. 111). Those advocating the approach stress that the capabilities approach is not an explanation for poverty. Instead, through the concepts situated within the framework, it provides an appropriate analytical lens through which to consider the state of well-being (Robeyns, 2006, p. 353). As such, the approach has developed an evaluative tool for exploring a local development intervention (in this case, skills development) and its reception on the ground.

The use of the capabilities approach has been extended to consider how skills development fits in with human development - a fit questioned by scholars before. McGrath (2012, p. 624) criticises the global discourse of vocational education and training (VET)³ as being addressed within an “outmoded model of development.” (2012, p. 624). Powell (2012) uses the capabilities approach to consider how VET relates to poverty alleviation. She argues that the contribution of VET to poverty alleviation is conditional upon an explicit consideration of the multi-dimensional nature of poverty, which is possible through the concepts in the capabilities approach (Powell, 2012, p. 646).

A further point by McGrath (2014) is that as vocational education is aimed at providing skills for work, the way we think about work should then be reconsidered in a way that aligns it with a more appropriate consideration of human development. The capabilities approach offers a new frame for employment as a way to achieve human capabilities and functionings (Sehnbruch, 2008). The

³ Vocational education and training (VET) is a term applied to training and education for participation in the world of work. South Africa’s Further Education and Training (FET) colleges are a version of this. FET colleges are there to prepare people for the world of work and act as a transition from school to jobs (Powell, 2014).

implication is that the *quality* of work should be a concern as well as whether or not work is obtained. This provides the opportunity to consider two aspects: Firstly, how work might obstruct certain important capabilities and functionings and secondly, consider the ways in which it contributes to these. Both of these are not considered in a quantitative calculation of person-months or employment rates (Sehnbruch, 2008), which remain predominant measures in CDM evaluations and employment evaluations. This renewed conceptualisation of work feeds back into how skills are understood and considered for their role in contributing to human development.

4.1 Application of the capabilities approach in this study

The capabilities approach will be used to consider how employment and training on the Kuyasa CDM project might have impacted work opportunities. This study uses a qualitative mode of inquiry where the goal is to provide a descriptive analysis. With this epistemological goal, the capabilities approach is used to highlight complexities of the link between skills development and well-being (Robeyns, 2005b, p. 194).

This study considers what was provided by the skills development component of the project and discusses how the resources provided by skills development play out in contributing to or limiting capabilities or opportunities for work. It is known that informal and survivalist livelihood strategies are prevalent in Khayelitsha, as in other developing contexts (Ngxiza, 2012, p. 191). Put differently, an investigation only concerning formal employment would lead to a severely limited understanding of well-being; someone might be classified as unemployed but might engage in a number of activities which contribute to livelihood outcomes. As such, this research is not only interested in whether or not the participants have formal jobs (although this is important and there are significant benefits associated with formal employment (Sehnbruch, 2008)) but, in its exploratory nature, it is also interested in how the capabilities and functionings are aspired to in informal activities. It thus draws on Palmer's (2007, p. 399) use of the term "decent livelihoods"; which encompasses "decent and productive work" in formal and informal contexts and makes room for the realities in which people "frequently straddle occupational divisions." This paper conceptualises work in a similar way to decent livelihoods.

From a variety of aspects that were considered, two aspects of the skills development experience are focused on in this paper. They are discussed in relation to the difference between what is proposed as valuable for beneficiaries (in project design) and what turns out to be of value on the ground with the aim to reflect on the local sustainable development benefits of skills development.

5. Case study description: Kuyasa, the Kuyasa Clean Development Mechanism project and its skills development component

The Kuyasa CDM project was implemented between 2008 and 2010 in Khayelitsha; a settlement on the outskirts of Cape Town, South Africa. Khayelitsha was established as a dormitory town in 1983 under the Apartheid government (Ngxiza, 2012). It was developed to house migrant labour to serve the city of Cape Town (Du Toit & Neves, 2007; Rogerson, 1999). Today, this legacy of marginalisation has persisted and is intensified through high levels of population densities as rural urban migration increases, leaving its 900 000 residents largely unemployed (Ngxiza, 2012). As such, it remains spatially and socially marginalised from wealthier parts of Cape Town. Kuyasa is a neighbourhood within Khayelitsha defined by an RDP housing development (Donaldson & Du Plessis, 2011).

The Kuyasa CDM project was the first CDM project to be registered in South Africa and included the retrofitting of 2 309 RDP houses with energy-efficient technologies including: ceilings for improved insulation, electrical wiring and solar geysers. Unemployed members of the Kuyasa community were trained and contracted to conduct this upgrading process. The project has been found to contribute to the alleviation of poverty through the increased efficiency of energy use in the houses contributing to a reduction of household vulnerability and lessening the burden on household incomes (Wlokas, 2011). It thereby had a direct impact on those who would be considered poor. This contribution was given international recognition through the awarding of the Gold Standard. Thus, the Kuyasa CDM project has significant and direct benefits at the community and household level with respect to development and well-being.

Of the Kuyasa CDM project budget, 30% was spent on the training component (as per conditions of the funding received from the EPWP through the Department of Environmental Affairs (DEA)). The skills development component included on-the-job training as well as a month-long period of training at an accredited FET institution, Northlink College, from which a certificate was gained (Goldman, 2010, p. 11). This form of skills development closely aligns with that experienced on EPWP projects. Despite the significant proportion of budget spent on training and employment and the international recognition as a pro-poor low-carbon project, little research has been conducted on the impact that this project has had on those who were trained and employed on the project until 2014.⁴

6. Methods

This study draws on data collected through two focus groups and interviews with beneficiaries, government officials and project stakeholders as well as time spent in the Kuyasa community (mainly in the local soup kitchen). Focus groups were held with five and four participants respectively who had worked on the project. Fourteen interviews were held with people who had worked and trained on the project. Of these, nine people received formal training at Northlink College and five received only the onsite training. The focus groups included a mixture of those who had only received onsite training and those who had additionally received formal training.

A number of interviews were held with additional informants and project stakeholders. These included someone involved in the design and implementation of the project (from an organisation known as SouthSouthNorth), a local government official involved in the early stages of implementation, a lecturer and a programme manager from Northlink, a shebeen⁵ owner in Kuyasa and a Kuyasa community leader and owner of the local soup kitchen. Additionally, conversations and interactions with local residents during the time of the fieldwork contributed to understanding the context.

The fieldwork took place from July to October 2013. Discussion points and interview questions were motivated by an interest into the experience of being employed on this project, what was received from the work and training, and how these endowments were used or not used since the project ended.

A limitation to this research is that the researcher is not fluent in the first language of most research participants, isiXhosa. This meant that either interviews had to be translated or participants had to

⁴ This paper reports a portion of a minor dissertation, James (2014), submitted towards a Master's degree at the University of Cape Town.

⁵ A shebeen is a house where liquor is sold, often without a licence to do so. They play a crucial role in largely overcrowded South African townships and informal urban settlements as publicly accessible spaces (Petersen & Govender, 2014).

speak in a language other than their home language. This limitation extends to the researcher's position as a white South African English-speaking female. As a white South African, the researcher was an outsider to the context and was exposed to what the participants think is accordingly appropriate. As a female, the researcher's engagement was constrained by concerns around safety.

7. Findings and discussion

What follows is a discussion of two aspects of the Kuyasa CDM project skills development component: formal recognition of skills or accreditation and the experience of employment. These two aspects are conceptualised as endowments and they are explored for how they play out in the lives of employees who, like all other human beings, are aspiring to achieve human functionings and capabilities which they deem valuable. The focus of this paper is to highlight the disconnect between what is formally provided and what is received by beneficiaries on the ground. In doing so, it illustrates the clash between what is intended in project design and what actually happens on the ground. As such, it highlights the ways in which such projects might or might not contribute to development and well-being via skills development.

7.1 Formal accreditation

One project facilitator interviewed explained that in designing the project, formal training was included for the purposes of accreditation. The institution selected for this purpose was the Northlink College. However, as mentioned before, accreditation was not completely obtained and employees did coursework *towards* accreditation and received a certificate which stood as proof of partial completion in electricity, plumbing or carpentry. It seemed to be that a more complete and recognisable accreditation had been sought by project facilitators through the Construction Education and Training Authority (CETA) but could not be obtained.

It is important here to consider what the oft-repeated phrase of 'accredited training' means in the context of qualifications in South Africa. The training modules completed by Kuyasa CDM employees were part of the practical component of a three-year (minimum) qualification recognised by the National Qualifications Framework. Kuyasa CDM employees completed as many modules as they could in the one month they spent as sponsored students at Northlink College. After this, they received a certificate listing the modules completed. These modules have a code recognised by the CETA which implies that they are recognised within the construction industry. However, this recognition remains vague for its contribution to increasing likelihood for employment. In conversation with a programme manager at Northlink, it has been established that this certificate can be built on if the opportunity for further training arises.⁶ The value of this recognition is unclear but the perception of those working at Northlink is that this training is insignificant in establishing a distinct increase in ability in the world of work.

The participants held a predominant perception that the certificate was given to them to serve a function or as an asset. As the project provided only temporary employment, the participants were given the certificate so that they could be assisted in finding another job. Some explained that the training that came with the certificate was useful and they learned a lot. Another view was that the skills had been acquired from previous work or on-the-job training, but the certificate was needed together with the skills for validation. From this perception, it is clear that skills are considered as

⁶ There were two exceptions, people who proved particularly talented in the area of electricity and were offered a bursary by Northlink and were eventually able to write a trade test.

separate from a qualification. In light of this, it is prudent to understand how the certificate served its purpose in post-project job search experiences. It is also important to understand how this asset might contribute to the capability for work.

Some participants acknowledged that the certificate had some use and reported presenting the certificate together with other qualifications they had obtained, when looking for a job. This group of participants did not however have work in the field of their Northlink certificate. Additionally, some remarked that the certificate was useless on its own. Thus, the certificate is seen as helpful albeit in addition to other documents, such as matric certificates contributing to their cultural capital in finding a job.

However, another sentiment existed around the certificate. There was a strong sense amongst some participants that the certificate was useless. In reflecting on the experience of the formal training, a reason provided was that training provided a recognisable certificate that, in the words of one participant “was not complete.” This is echoed by those participants who, despite expressing appreciation of the certificate, consider the certificate to be useless in finding a job on its own, and in any case pursued jobs in areas unrelated to the skill qualified in the certificate.

A somewhat surprising result of using the certificate to find work was that it could have the opposite effect. One participant explained that he went looking for a labour job and was not hired because he showed the prospective employer his certificate. He explained that having a certificate makes the prospective employer concerned about having to pay more for labour and so detracts from hiring.

A final and alarming perception around the certificate is that it misrepresents and discredits skills. As training fell under either plumbing, electrical, mechanical or carpentry, the certificate lists modules within these specific areas. Those interviewed shared a perception that an asset when it came to employment was their ability to do a range of things. The certificate, in formalising one set of skills, misrepresents the full skills set of the person. This is significant when considering adult education in other broader contexts, and the role of training in enhancing their participation in the job market.

The discrediting of skills is evident in remarks from participants describing a lack of distinction between someone who had received formal training and someone who had just worked on site and received on-the-job training, and others who had years of previous experience not yet recognised. Within the community then, there is the perception that the certificate does not distinguish people based on their skills. This notion is associated with disappointment in the certificate and perhaps extends to formal training in general.

Thus, while some reported the certificate to have value in addition to other qualifications, there was a prominent perception that that the certificate was not useful in finding work and in the worst case misrepresents or discredits skills that are previously considered valuable in practice. To contextualise these perceptions around the certificate and use thereof, it was often acknowledged in conjunction with discussions around scarcity of jobs. This suggests that the certificate was not enough to remove the constraint of few jobs.

In discussions around jobs searches, it also became evident that rather than through formal qualifications, jobs were found through social networks and the illustration of skills. One participant put it aptly that “the certificate will not do the work for you” in explaining that he must have a chance to physically show his skills if he is going to be employed. Another predominant notion is that one needed a friend who was already hired to get access to employment or getting a job was about who

you know. It is clear that the certificate does not hold much weight in what counts for employment. This is especially the case when there are so many ways the certificate is not representative of the full range of useful skills in that context.

7.2 Skills and capabilities in Kuyasa

The capabilities approach describes capabilities as determined by both assets or endowments and contextual constraints. Thus, an endowment has to be considered with respect to its contextual constraints to determine how it will contribute to capabilities (not just assume it will contribute in the way intended). For several people employed on the Kuyasa CDM project, further training was not an option. People who found jobs in other fields also indicated that further training was not considered valuable in terms of capabilities or functioning's in their context. The limited and disappointing job opportunities⁷ point to the limits of a certificate in contributing to the kind of capabilities and functioning's it sets out to.

This underwhelming reception of the formal certificate is not to say that the training was worthless. But when these skills were provided, they were presented to beneficiaries as a means to an end, i.e. something that was inherently useful. The experiences described of using this certificate to find a job (to achieve capabilities and functioning's) suggest that this asset was not valuable and even limited as a means to an end. Furthermore, accreditation is intended to provide confirmation of a skill. In Kuyasa, it is evident that the certificate had opposite and additional negative effects of misrepresenting and delegitimising skills. In providing formalised skills as something inherently valuable, the project disregarded the context; that the certificate was not enough to find a job in the field trained and that there was little chance of those people accessing further training.

This consideration of the certificate - the distinguishing characteristic of accredited training - illustrates a clash of normative conceptualisations within projects under EPWP-funding conditions: that is a conceptualisation that people are lacking in skills, and that the provision of these skills will be inherently good. A number of contextual constraints, including the lack of jobs, low-quality jobs, the lack of financial capital or opportunity to study further and the far distance from business centres, mean that this inherent good is not in all cases true. Furthermore, it is not the case that, if the value of skills is not realised, no harm is done. The case in question illustrates that the provision of a formalised skill can take away something that was previously valued, such as the multiplicity of informal skills in construction work.

7.3 Unintended, unreported benefits

The discussion above illustrates a case where an outcome of skills development that is prescribed as valuable is experienced, on the ground, as non-valuable and debilitating. The next discussion presents the other side of the coin. The participants indicated that the experience of work and training on the project was beneficial in ways not directly linked to employment opportunities. Such benefits may go undetected by the rough consideration of employment rate or job creation. While employment is of high importance to the achievement of human functionings in this context, which lacks many forms of formal support, neglecting these subtle benefits limits the recognitions of skills development and reinforces a conceptualisation of human development as being a one dimensional matter of income generation.

⁷ Interactions with the participants revealed that there were limited jobs in general and limited jobs related to the work done on the Kuyasa project. In addition, those who had tried to start up businesses doing electricity and ceilings for the surrounding residents were not able to make a profit.

7.4 The experience of employment: the multiple dimensions of work

A prominent community leader in Kuyasa explained that “people need something to do each day, those who are unemployed need to keep busy.” This was echoed by a young male participant who explained that the youth need something to do each day. An additional sentiment exists that less drugs were taken when the Kuyasa project took place as people were kept busy. This reflects a less often noticed benefit of work, which is that being occupied, keeps people away from using drugs.

Several of those interviewed referred to the job at the Kuyasa CDM project as their first job. This was despite the fact that after questioned further, in at least two cases, that they had been engaged in many other income earning activities, such as working as a domestic worker or street trading. This suggests that having a formalised job is valued differently. Many explained that through receiving a uniform to wear at work each day, a sense of belonging and respect was gained. To further emphasise the effect that belonging to an organisation triggers, one participant explained that the probation period during which participants do not receive a uniform is experienced as embarrassing. Furthermore, three participants expressed that the uniform enabled household owners to trust and allow people into their houses. There are clear accounts of the work experience providing a sense of self-worth and facilitating trust amongst Kuyasa residents.

It is also evident that social cohesion was built up over the operation of the project. Many participants expressed that, because they worked on the project, they have had the chance to illustrate their skill and ability to work with these specific installations and are able to, for example, fix ceilings or solar geysers. As a result, they are called on for maintenance jobs when they are needed. This social capital means that ex-colleagues are called on if someone needs help on a maintenance jobs. Although these jobs are informal and very infrequent (referred to as *piece jobs*), their existence suggests a strengthened social network. Many of those employed testified to the fact that the project allowed this network to be built.

These benefits might go unnoticed in rapid appraisals of these projects. However, they warrant attention for two reasons at least. Firstly, they bring value to people’s lives. This should be acknowledged explicitly in appraisal so that attention shifts away from income levels and employment rates towards a multi-dimensional understanding of well-being. Secondly, they draw attention to the void left in the wake of such a project. The termination of the Kuyasa project did not only take away an income source but took away a route to self-worth, positive identity creation and the possibility of contributing towards a community - all necessary (although incomplete) human functionings. This notion is expressed starkly by the words of the community leader in Kuyasa;

“I have got something that I want to say. You know when siyazenzela (work on the Kuyasa CDM project) ended there are a lot of changes in our children. And these (those who worked on the project and more) are my children. There are a lot of changes, a lot of changes. Because they just stop.”

This perception ties into the sensitivity of such development interventions. Perhaps, these projects should focus on outcomes apart from formalised skill recognition. Alternatives might include: business start-up training, which enhances, further promotes and values informal livelihoods activities or a platform where community members can engage with each other and be productive together. This could provide the capability of contributing to one’s immediate society.

8. Concluding discussion

This paper has used concepts from the capability approach to explore the skills development component of the Kuyasa CDM project. It specifically draws out examples of how resources provided by the project play out on the ground, focusing on the formal training certificate and the experience of work. In so doing, it highlights a clash between project design or policy intention, and a complex local context. Particularly, in any local development effort, what is thought to be provided is not always actually maintained. Furthermore, the training and work experience provided and valued is either unintentional, unnoticed and, most importantly, not then given due consideration for the impact it has during the project and in its wake (due to evaluative frames preoccupied with quantitative results, like employment rate and income generation).

There is potential to fine-tune skills development efforts to enhance their contribution and avoid unnecessary aspects or harmful impacts. Four recommendations follow on how to fine-tune a skills development project, such as the Kuyasa CDM project.

Firstly, time needs to be spent on establishing a way to value skills (also known as qualification) in this context. In the case of Kuyasa, receiving a certificate (validating only a limited portion of skills had by beneficiaries and this limited training in one field) was found to be debilitating in job searches. If training can only be provided in this limited fashion, the accreditation or proof of participation in this training should be accompanied with recognition of other skills possessed by the individual.⁸ In this context, it is evident that people make use of a number of different skills to achieve their human functioning. This calls for a design in accreditation or qualification which acknowledges a multiplicity of construction skills and other specific training. An interim solution here might be to provide reference letters for other work.

Secondly, the evaluation of such training should embrace a multi-dimensional evaluative approach in order to adequately measure the quality of work and learning that occurred on the project. A move away from this job-orientated evaluation of skills would encourage a conceptualisation of work and training that is more sensitively aligned with human development. Sehnbruch (2008) discusses an indicator for the quality of work that is based on the capabilities framework. This framework stipulates basic capabilities (being fed, housed and in good health) important for mere survival as well as general capabilities (the ability to participate in the life of the community and the ability to appear in public without shame) which are important for self-respect, social integration and participation (Sehnbruch, 2008, p. 567). Not all of these capabilities are dependent upon income or simply having a job but are important for individual development. Using this full range of capabilities might provide a greater understanding of what is provided by a project and how skills development projects might be enhanced in a context where jobs are scarce.

Thirdly, care should be taken to enhance local structures and not devalue them, particularly in terms of skills as well as local and informal economies. Experiencing a formal job has proven to be highly satisfactory for participants. However, options available when the project terminates might perhaps make local forms of work appear inadequate and unsatisfactory. If further efforts could go towards enhancing and sustaining strategies that exist locally, then greater ambition to engage in work might result in more local jobs. This could take the form of providing some formal acknowledgement of

⁸ Northlink and the City of Cape Town are currently working on an effort to provide qualifications to people who have worked in maintenance for the city for 20 years or more.

informal services or providing business skills applicable to the context of mixed formal and informal activities.

A final point of recommendation is that a subtle but sensitive form of expectation management in the discourse of skills provision must be considered. The underlying perceptions behind why skills are provided - that they have inherent value - can be misleading. This ultimately creates an expectation that the provided skill will unequivocally bring some value to the trainee's life. This is despite explaining that it is only a part of a larger qualification. A dash of expectations, a sense of deception and exclusion emerges as skills are not found to be permanently useful for lives in the ways expected in that context. This is an undesirable affect for a context that is so systemically excluded (racially, linguistically, economically and socially) from the wealth of South Africa's society. This emphasises further the importance of using mechanisms proposed for local development in a way that is sensitive and appropriate to the context.

This paper has considered the case of the Kuyasa CDM skills development component for its potential contribution for local sustainable development. It thus considers one of the two goals of the CDM, one that has been criticised as neglected. It is not a specific role of the CDM project to skill people, however employment and training are perhaps mechanisms through which the CDM might have sustainable local development benefits. Therefore, it is a shortcoming that employment is rarely looked at further than the project operation phase – that there is a general lack of follow-up evaluation. It is also a concern that awards, such as the Gold Standard, are given - partially on the basis of skills development - for projects being pro-poor without considering the long-term benefits. Surely, an element of being pro-poor is sustained upliftment and not simply upliftment when there is funding and when there is limelight.

Through global literature and fieldwork, it is clear that there is a lack of post-project evaluation around the experience of employment or skills development. As an experience of training presents the potential for the long-term local benefits, it is odd that little, if any attention, is paid to this. This lack of understanding long-term employment impacts perhaps reflects the bias in CDM evaluation towards measuring the mitigation of GHG emissions rather than to understand the local sustainable development benefits.

Another lesson that can be learnt from this investigation is that there needs to be attention paid to the challenge of short-term employment. There are very few jobs available for those living in Kuyasa. Therefore, despite the provision of some skills, the contextual constraints limit the use of those skills. This is reflected in the findings of McCord (2005), where few people were able to enter the job market after the short-term employment on an EPWP project. Perhaps, lessons can be drawn from the Community Works Programme, discussed by Philip (2013) which is based on the logic that a small continuous income is better than a larger short-term income. The Community Works Programme creates small part-time but continuous jobs derived from the needs of the community. A similar model would have been helpful in Kuyasa, as those who were employed could have the continued opportunity to contribute towards their community and would not have a sudden void of income.

In considering the Kuyasa CDM project in relation to skills development, this research considers the utilisation and treatment of a potential sustainable development indicator aside from that of the reduction of GHG emissions. It does not claim that skills development is a requirement of the role of CDM projects. The Kuyasa CDM project made use of a national employment initiative model to conduct skills development. From this provision of skills were some valuable assets as well as some unexpectedly non-valuable assets. It is questionable whether this effort has contributed to a sustained improvement in local socio-economic development. This paper thus reflects the critique that effective

consideration of other sustainable development indicators, more closely related to poverty alleviation and local socio-economic development, is lacking.

In conclusion, Kuyasa residents face significant constraints to achieving necessary capabilities and functionings. It is constraining contexts, such as that of Kuyasa, which undermine the idea that the provision of skills can unquestionably lead to sustained development. It is thus in the clash of contexts that the well-intentioned provision of skills is undermined. A preoccupation with the provision of skills based on defining people in that context is lacking, diverting attention from systemic and broader factors which require more than just additional skills to overcome. The imposition of an employment-unemployment orientated valuation of skills development undermines the subtle emotional upliftment and sense of inclusion and achievement that the training brought and took away when the programme ceased. Thus, without understanding the clash of contexts, it is questionable as to whether skills development can be considered to contribute to a sustainable outcome of a project.

9. References

- Allais, S. (2012). Will skills save us? Rethinking the relationships between vocational education, skills development policies, and social policy in South Africa. *International Journal of Educational Development*, 32(5), 632–642.
- Aroun, W. (2012). Climate jobs and manufacturing in South Africa. *International Journal of Labour Research*, 4(2), 229–248.
- Bradlow, B., Bolnick, J., & Shearing, C. (2011). Housing, institutions, money: the failures and promise of human settlements policy and practice in South Africa. *Environment and Urbanisation*, 23, 267–275.
- Casillas, C. E. & Kammen, D. M. (2012). Quantifying the social equity of carbon mitigation strategies. *Climate Policy*, 12(6), 690–703.
- Crowe, T. L. (2013). The potential of the CDM to deliver pro-poor benefits. *Climate Policy*, 13(1), 37–41.
- Department of Environmental Affairs. (2011) *National Climate Change Response White Paper*. Pretoria: Department of Environmental Affairs. Available at <http://goo.gl/xlNYaH> [5 January 2014].
- DeJaeghere, J. & Baxter, A. (2014). Entrepreneurship education for youth in sub-Saharan Africa: A capabilities approach as an alternative framework to neoliberalism's individualizing risks. *Progress in Development Studies*, 14(1), 61–76.
- Department of Energy. (n.d.). *South African Designated National Authority*. http://www.energy.gov.za/files/esources/kyoto/kyoto_frame.html [15 August 2014].
- Disch, D. (2010). A comparative analysis of the “development dividend” of Clean Development Mechanism projects in six host countries. *Climate and Development*, 2(1), 50–64.
- Donaldson, R. & Du Plessis, D. (2011). *Analysis and highlighting of lessons learnt and best practices in the urban renewal program*. Report prepared for the City of Cape Town by Tourism and Urban Research Unit cc. Cape Town. Available at <http://goo.gl/JKMVYT> [7 December 2013].
- Du Toit & Neves, D. (2007). *In search of South Africa's Second Economy: Chronic poverty, economic marginalisation and adverse incorporation in Mt Frere and Khayelitsha*. CPRC Working Paper 102. Chronic Poverty Research Centre. Available at www.plaas.org.za/sites/default/files/publications-pdf/WP1.pdf [15 March 2013].
- Ellis, J., Winkler, H., & Corfee-morlot, J. (2007). CDM: Taking stock and looking forward. *Energy Policy*, 35, 15–28.
- Fay, J., Kapfudzaruwa, F., Na, L., & Matheson, S. (2012). A comparative policy analysis of the Clean Development Mechanism in South Africa and China. *Climate and Development*, 2(1), 37–41.
- Goldman, M. (2010). *Kuyasa CDM Project: Renewable energy efficient technology for the poor*. New York. Available at <http://goo.gl/9zbXs2> [31 January 2014]
- Hlatshwayo, M. (2014). Debating the Nexus of Education, Skills and Technology in the Age of Lean Production: A Case Study of the ArcelorMittal Vanderbijlpark Plant. In *Education, the economy and society*. S. Vally & E. Motala (Eds.).

- Huchzermeyer, M. (2001). Housing for the poor? Negotiated housing policy in South Africa. *Habitat International*, 25, 303–331.
- James, A. (2014). *Capabilities and the Kuyasa CDM project: Exploring skills development and its contribution to work opportunities*. University of Cape Town.
- King, K. (2009). Education, skills, sustainability and growth: Complex relations. *International Journal of Educational Development*, 29, 175–181.
- Maclean, R. (2009). Introduction by Series Editor. In *Work, learning and sustainable development*. J. Fien, R. Maclean, & M.-G. Park (Eds.). Springer, Bonn.
- McCord, A. (2005). A critical evaluation of training within the South African National Public Works Programme. *Journal of Vocational Education and Training*, 57(4), 563–586.
- McGrath. (2014). *Skills for Work and Life: Towards a Transformative Approach to Vocational Education and Training*. *Unpublished paper*, School of Education, University of Nottingham.
- Mcgrath, S. (2012). Vocational education and training for development: A policy in need of a theory? *International Journal of Educational Development*, 32(5), 623–631.
- McGrath, S. & Akoojee, S. (2009). Vocational education and training for sustainability in South Africa : The role of public and private provision. *International Journal of Education Development*, 29, 149–156.
- Ngxiza, S. (2012). Sustainable economic development in previously deprived localities: The case of Khayelitsha in Cape Town. *Urban Forum*, 23, 181–195.
- Nussbaumer, P. (2009). On the contribution of labelled Certified Emission Reductions to sustainable development: A multi-criteria evaluation of CDM projects. *Energy Policy*, 37, 91–101.
- Olsen, K. H. & Fenhann, J. (2008). Sustainable development benefits of Clean Development Mechanism projects: A new methodology for sustainability assessment based on text analysis of the project design documents submitted for validation. *Energy Policy*, 36, 2819–2830.
- Palmer, R. (2007). Skills for work?: From skills development to decent livelihoods in Ghana’s rural informal economy. *International Journal of Educational Development*, 27, 397–420.
- Petersen, L. & Govender, T. (2014). Shebeens and spaces and places of informality, enterprise , drinking and sociability. *South African Geographical Journal*.
- Philip, K. (2013). *The community work programme: Building a society that works*. ILO Employment Working Paper No. 149. <http://www.tips.org.za/publication/community-work-programme-building-society-works> [20 March 2014].
- Powell, L. (2012). Reimagining the purpose of VET – Expanding the capability to aspire in South African Further Education and Training students. *International Journal of Educational Development*, 32(5), 643–653.
- Robeyns, I. (2005a). The capability approach: A theoretical survey. *Journal of Human Development*, 6(1), 37–41.
- Robeyns, I. (2005b). Selecting capabilities for quality of life measurement. *Social Indicators Research*, 74, 191–215.

- Robeyns, I. (2006). The capability approach in practice. *The Journal of Political Philosophy*, 14(3), 351–376.
- Rogerson, C. M. (1999). Local economic development and urban poverty alleviation: The experience of post-Apartheid South Africa. *Habitat International*, 23(4), 511–534.
- Sehnbruch. (2008). From the quantity to the quality of employment: an application of the capability approach to the Chilean labour market. In *The capability approach: Concepts, measures and applications*. F. Comim, M. Qizilbash, & S. Alkire (Eds.). Cambridge University Press, Cambridge UK.
- Sen, A. (1980). Equality of what? In *The Tanner Lectures on Human Values*. S. McMurrin (Ed.). University of Utah Press, Salt Lake City.
- Statistics South Africa. (2013). *Quarterly Labour Force Survey, Second Quarter, Statistical Release P0211*. Pretoria.
- Subbarao, S. & Lloyd, B. (2011). Can the Clean Development Mechanism (CDM) deliver? *Energy Policy*, 39(3), 1600–1611.
- Sutter, C. & Parreño, J. C. (2007). Does the current Clean Development Mechanism (CDM) deliver its sustainable development claim? An analysis of officially registered CDM projects. *Climate Change*, 84, 75–90.
- Thorne, S. (2008). Towards a framework of clean energy technology receptivity. *Energy Policy*, 36, 2831–2838.
- Wlokas, H. L. (2011). What contribution does the installation of solar water heaters make towards the alleviation of energy poverty in South Africa. *Journal of Energy in South Africa*, 22(2), 27–39.