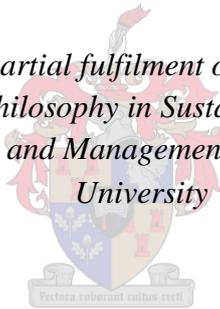


**The Development Impact of the Renewable Energy Independent Power
Producer Procurement Programme on South Africa's Small Towns**

by
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*Thesis presented in partial fulfilment of the requirements for the
degree of Master of Philosophy in Sustainable Development in the
Faculty of Economic and Management Sciences at Stellenbosch
University*



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April 2019

Declaration

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Acknowledgement of funding and indemnity of funders:

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Abstract

This thesis aims to explore how effective economic development efforts in the Renewable Energy Independent Power Produce Programme (REIPPPP) have been at creating long term improvements in the livelihood of low income communities. The research sheds light on some of the complexity that exists within community development in the REIPPPP, and highlights common mentalities and approaches that exist among renewable energy developers when engaging with the poor. An overarching transdisciplinary research method is used, in conjunction with a multiple case study approach to document existing practices seen in the Northern Cape, and compare these with best practice case studies from developing nations that are renowned for their community development approaches around the world.

The core argument emerging from the research is that community development efforts, as they exist in their present form, are largely ineffective because they do not address core psychological issues, but rather take a band-aid approach. Renewable energy companies commonly take a top-down, hand-out, risk minimising approach that further entrenches feelings of worthlessness, hopeless and a recipient mentality among the poor. In order for development funding to be effective, community development efforts need to create tangible improvements in wellbeing for the poor that will continue into the long term. To achieve this, it is argued that developers need to take a deeply engaged approach and work closely with communities, as opposed to making decisions for them. Additionally, embedding enterprise thinking into development initiatives can support the continuation of the project into the long term in terms of funding and man-power. Finally, the ecological impacts of community upliftment initiatives need to be considered if the goal is to achieve a more sustainable form of development.

Key words: community development, economic development, corporate social responsibility, corporate social investment, hand-out mentality, aid approach, sustainable development, South Africa

Opsomming

Die doel van hierdie proefskrif is om te ondersoek hoe effektiewe ekonomiese ontwikkelingspogings in die Hernubare Energie Onafhanklike Kragproducent Verkrygingsprogram (REIPPPP), was om langtermynverbeterings in die lewensbestaan van lae inkomste gemeenskappe te skep. Die navorsing werp lig op sommige van die kompleksiteit wat bestaan binne gemeenskapsontwikkeling in die REIPPPP, en beklemtoon gemeenskaplike denkwyses en benaderings wat deur hernubare energie ontwikkelaars gebruik word wanneer hulle met die armes betrokke raak. 'n Oorhoofse transdissiplinêre navorsingsmetode is gebruik, in samewerking met 'n meervoudige gevallestudie-benadering om bestaande praktyke in die Noord-Kaap te dokumenteer en vergelyk dit met beste praktykgevallestudies van ontwikkelende lande regoor die wêreld wat bekend staan vir hul gemeenskapsontwikkelingsbenaderings.

Die kernargument wat uit die navorsing voortspruit, is dat gemeenskapsontwikkelingspogings, soos hulle in hul huidige vorm bestaan, grootliks ondoeltreffend is omdat hulle nie kernpsigologiese probleme aanspreek nie, maar eerder 'n bandhulpbenadering volg. Hernubare energie maatskappye neem gewoonlik 'n neerbuigend oorhoofse, bakhand mentaliteit en risikominimaliserende benadering wat die gevoelens van waardeloosheid, hopeloosheid en 'n ontvanger se mentaliteit verder onderdruk. Ten einde vir die ontwikkeling befondsing doeltreffend te maak, moet gemeenskapsontwikkelingspogings tasbare verbeterings in welsyn vir die armes skep wat op lang termyn sal voortduur. Om dit te bereik, word aangevoer dat ontwikkelaars 'n diep gekoppelde benadering moet inneem en saam met gemeenskappe moet werk, in teenstelling met die neem van besluite vir hulle. Tweedens, die inskerping van ondernemingsdenke in ontwikkelingsinisiatiewe kan die voortsetting van die projek in die lang termyn ondersteun in terme van befondsing en mannekrag. Laastens, die ekologiese impak van ontwikkelings moet oorweeg word as die doelwit is om 'n volhoubare vorm van ontwikkeling te bewerkstellig.

Kernwoorde: gemeenskapsontwikkeling, ekonomiese ontwikkeling, korporatiewe sosiale verantwoordelikheid, korporatiewe maatskaplike belegging, bak hand mentaliteit, hulpbenadering, volhoubare ontwikkeling, Suid Afrika

Acknowledgements

I would like to thank the National Research Foundation for its generous financial support, without which the insight gained through the research process would have been impossible. To a particular municipal official for selflessly giving of his time to introduce us to countless stakeholders in the Northern Cape. Without him, access to various parties would have been slow, and very likely impossible. I am also grateful to everyone that was willing to speak to us and share their insights and experience. Gratitude must also be expressed to Megan Davies for her support, wisdom and friendship, especially during the field research. Thank you to Professor Mark Swilling for his guidance through the process, for enabling us to meet key stakeholders in the REIPPPP, and for access to research funding. To my fellow researchers, friends and educators at the Sustainability Institute, thank you for walking the long journey with me, and for the knowledge shared. And finally, to my parents for their encouragement, and for allowing me the freedom and giving me the opportunity to pursue an unconventional field of study that I am deeply passionate about.

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List of Acronyms and Abbreviations

BEE	Black Economic Empowerment
CEO	Chief Executive Officer
CSI	Corporate Social Investment
CSR	Corporate Social Responsibility
CST	Centre for Complex Systems in Transition
CV	Curricula Vitae
DFI	Development Finance Institution
DOE	Department of Energy
DStv	Digital Satellite Television
ED	Economic Development
Eskom	Electricity Supply Commission of South Africa
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
IDC	Industrial Development Corporation
IDP	Integrated Development Plan
IPP	Independent Power Producer
km	Kilometre
MEC	Mineral Energy Complex
MNCS	Multinational Corporations
NGO	Non-governmental Organisation
NDP	National Development Plan
RDP	Reconstruction and Development Plan
REIPPPP	Renewable Energy Independent Power Producer Procurement Programme
SA	South Africa
SED	Socio-economic Development
SEDA	Small Enterprise Development Association
SEFA	Small Enterprise Finance Organisation
SLP	Social Labour Plan
TV	Television
WWF	World Wide Fund for Nature

1 Chapter 1 – Introduction

1.1 Introduction and Background

South Africa has among the highest rates of inequality, poverty and unemployment in the world. Much of this can be attributed to vast segregation and injustice perpetrated during the Apartheid era, and also to an economic system that has proven to be ineffective at distributing wealth equitably (Cronjé & Chenga, 2009; Swilling, 2010; Swilling & Annecke, 2012). Institutions such as governments, aid organisations, non-governmental organisations (NGOs) and corporations commonly respond to these issues, inadvertently or not, by taking a disengaged, top-down, hand-out, feel-good approach.

Many of the country's rural areas in particular, are in need of support such as economic opportunities, healthcare, education, housing and other infrastructure. The mining sector, with their operations usually in outlying areas, was mandated to support such communities as part of their corporate social responsibility (CSR) mandate. More recently the Department of Energy (DOE) included 'economic development' criteria into the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). The programme invited independent renewable energy companies or independent power producers (IPPs) to build power plants in South Africa and sell the energy generated into the national grid. The economic development criteria require IPPs to consider local procurement, and requires companies to engage in community upliftment efforts in communities surrounding the plant.

Through this research, the effectiveness of the community development initiatives in the REIPPPP are investigated in order to understand the long-term impact expected to be realised in the lives of low income, rural communities. Though large-scale renewable energy development efforts are still at an early stage, so far it is clear that renewable energy companies are following a similar, hand-out, risk-minimising approach in their community upliftment efforts to that which mining companies and aid organisations have used historically and that have proven problematic.

This approach is problematic because it reinforces existing power dynamics between companies and low-income communities, and in so doing creates dependencies, and further entrenches deep psychological feelings of worthlessness and hopelessness that exists in low income communities. Such a mindset has a debilitating impact on all facets of their lives – a problem commonly not addressed or even acknowledged by institutions engaging in community upliftment efforts, including IPPs (Anonymous, 2016a; Mbeki, 2009; Moyo, 2009; The 4th Barefoot Guide Writer's Collective, 2015).

To explore the argument that the hand-out mentality associated with corporate social responsibility is problematic, a transdisciplinary research methodology is employed.

Theory about this methodology and the manner in which it was implemented, including challenges faced, are discussed in this chapter. Thereafter, in chapter 2, a literature review comparing the CSR efforts of mines and renewable energy projects in rural South Africa is shared, along with theory about key themes related to community development.

The following chapter consists of case studies relating to CSR efforts in the REIPPPP in order to compare findings from the literature review to real-world findings. Insights from a review of literature around best practice community development efforts from around the world are then shared in Chapter 4, followed by closing remarks in Chapter 5.

1.2 Significance of the Study

The total investment in the national renewable energy programme amounts to around R201,8 billion, which translates into 6422MW of generation capacity from 112 renewable energy projects (Anonymous, 2016b; Independent Power Producer Office (IPP Office), 2018a: 2). As of March 2018, 62 projects have commenced commercial operations and 54 have been operational for more than a year (IPP Office, 2018a). Because the REIPPPP was structured to channel a percentage of renewable project revenues to resource poor communities, the introduction of the overall programme into the South African economy makes a significant amount of finance available to rural areas in deep need. There are three primary ways that low-income communities surrounding renewable energy projects benefit financially. The first is, as per the economic development requirements, that companies need to allocate a minimum of 2,5% ownership of the renewable energy plant to one or several surrounding communities. The total net income that needs to be allocated to communities, in real terms, amounts to R12,2 billion per year for the 20 years that renewable energy plants should be operational (for all bidding windows thus far) (IPP Office, 2018a: 34).

In addition to this, companies must engage in socio-economic development efforts as well as enterprise development efforts to benefit communities. The associated minimum financial commitment, decided at bid stage, was 1% of revenue for socio-economic development with a target of 1,5%, and no minimum figure for enterprise development spend with a target of 0,6% (for large-scale projects) (IPP Office, 2018a: 12). In monetary terms, this has translated into socio-economic contributions of R573.6 million to date thus far in the REIPPPP, with R68,6 million spent in the first quarter of 2018, and an enterprise development spend of R188,8 million thus far, with R22,5 million being spend in the first quarter of 2018 (IPP Office, 2018a: 2). This is, therefore, an opportunity for funding, independent of inefficient and corrupt government institutions, to be used in ways that are effective and transparent.

This research, having taken place within the first few years of the twenty-year lifespan of renewable energy power plants, manages to identify several areas of weakness with the current community development approach taken by IPPs. The findings highlighted in this thesis can therefore guide development initiatives to ensure that the available finance is efficiently utilised to support the prosperity of South Africa's rural towns.

1.3 Research Methodology

1.4 Overarching Approach

Solutions to these multifaceted social, ecological and economic challenges, in developing country contexts, cannot be found through taking monodisciplinary approaches (Breda, Musango & Brent, 2016). The extreme need seen in developing country low-income communities necessitates research methodologies that are non-extractive, solution-orientated, and aim to produce scientific knowledge which will be useful beyond the hands of academics and researchers. The transdisciplinary research approach is one such methodology that Swilling, Tavener-Smith, Keller, Heyde, and Wessels cite (2013: 10) as an "appropriate form of knowledge production in response to complex socio-economic and environmental challenges".

This thesis will form one of many studies coming from the research group known as the Renewable Energy for Transitions group, working at the Centre for Complex Systems in Transition (CST) at Stellenbosch University and investigating the impact of the REIPPPP. The umbrella initiative, the CST, endeavours to bring together complexity thinking, sustainability science and transdisciplinary research methodology, and by so doing fundamentally change the conception of a researcher by encouraging, as required by transdisciplinary methodology, the researcher to become active.

Transdisciplinary research is fundamentally a solution focused research approach, and understands that knowledge production cannot be the ultimate goal of the research process (Breda *et al.*, 2016; Pohl & Hirsch Hadorn, 2007; Regeer & Bunders, 2009). Instead, in the words of Breda and Swilling (2016: 18), founders of the CST, the core reason for creating knowledge should be "to co-generate real-world solutions to contribute to redressing existing social, economic and educational inequalities, as well as to restore any human-induced damage or disruption to associated ecological systems".

Having the principle objective of wanting to produce useful knowledge, this thesis takes an overarching transdisciplinary research methodology approach. The thesis consists of a literature review, a set of case studies informed by a year of field research, and a second set of best practice case studies derived primarily from desktop research. The research made use of empirical and theoretical approaches as part of the transdisciplinary process. Using a transdisciplinary research design, the practical

methods included the research question development, field observations, and semi-structured interviews.

This researcher was fortunate to be able to spend the period of a year immersed in the REIPPPP network, during which the researcher had more than 120 engagements, including formal and informal engagements, with a multitude of stakeholders. These engagements ranged from senior officials at the Department of Energy to rural, low-income community members. Through this process, research design and questions were developed.

1.5 Transdisciplinary Research Approach

Brandt (2013: 1–2) define transdisciplinarity as a research methodology that includes several scientific disciplines and input from practitioners outside academic spheres, with focus on shared problems. Transdisciplinary research by its nature, is integrative, and cannot depend on single disciplines (Breda *et al.*, 2016; Wickson, Carew & Russell, 2006). As such the research combines literature and real-world learnings, and produces findings by identifying and drawing connections between various discourses and fields. Through this process, in the words of Breda and Swilling (2016), “the role of the researcher is to learn everything possible about a specific situation or event and then give it an original interpretation”.

Thompson, Owen, Lindsay, Leonard and Cronin (2017: 32) have experience in building resilience to natural hazards and disasters among low income groups, and say that the research approaches of past studies have “traditionally been divided, with quantitative investigations of physical hazard and risk being carried out in parallel to qualitative investigations of social vulnerability and capacity.” They acknowledge that it is becoming increasingly important for research to consider human and natural systems as intertwined, “with research encompassing a broad range of topics such as earth sciences, statistics, sociology, economics, politics, health, the built environment, and the cultural and social fabric of at-risk communities” (Thompson *et al.*, 2017: 32). Transdisciplinary research takes a constructivist view of scientific knowledge that is connected with the local context whereas traditional research methodologies often consider scientific knowledge as an “independent and value-neutral objective truth” (Thompson *et al.*, 2017: 31).

Transdisciplinarity, according to Thompson *et al.* (2017: 31), reflects one of the greatest degrees of integration compared to other research approaches. Multidisciplinarity is the cooperation of disciplines and interdisciplinarity is about the integration of disciplines. Interdisciplinarity goes beyond multidisciplinarity, because cooperation leads to the creation of methods and theory. Transdisciplinarity goes a step further and attempts to generate solution-orientated knowledge. Transdisciplinarity refers to the co-production of knowledge “which transcends disciplinary, academic, and epistemic boundaries” that is considered “a reflexive and

inclusive approach” (Thompson *et al.*, 2017: 31). Transdisciplinary appeals to many scientific disciplines, and goes beyond these by including non-academics (Hirsch Hadorn, Hoffmann-Riem, Biber-Klemm, Grossenbacher-Mansuy, Joye, Pohl, Wiesmann & Zemp, 2008). As such, transdisciplinary research entails interactions between science, policy, and society that are explicit, recognise complexity, acknowledge various forms of knowledge to achieve the goal of solving real world or ‘wicked’ problems that have a large number of impacts, interdependencies and uncertainties (Hirsch Hadorn *et al.*, 2008).

An alternative research methodology to transdisciplinary science was also considered. According to Koshy, Koshy and Waterman (2011) there are many terms that can describe action research, including Participatory Action Research (PAR), community-based study, co-operative enquiry, action science and action learning. The purpose of this kind of research is to encourage change in different settings (Koshy *et al.*, 2011).

Waterman, Tillen, Dickson and de Koning (2001: 4) provide a comprehensive and practical definition of action research:

“Action research is a period of inquiry, which describes, interprets and explains social situations while executing a change of intervention aimed at improvement and involvement. It is problem-focused, context specific and future-orientated. Action research is a group activity with an explicit value basis and is founded on a partnership between action researchers and participants, all of whom are involved in the change process. The participatory process is educative and empowering, involving a dynamic approach in which problem-identification, planning, action and evaluation are interlinked. Knowledge may be advanced through reflection and research, and qualitative and quantitative research methods may be employed to collect data. Different types of knowledge may be produced by action research, including practical and propositional. Theory may be generated and refined and its general application explored through cycles of the action research process.”

Within action research, there are two core approaches that emerge. One of these focuses on representing a collective, while the other places emphasis on the inclusion of individuals as non-specialists in the research process (Elzinga, 2008). Both methods have the common view that the involved stakeholders should be brought into the research process early, and be given the resources and platform to impact decisions (Elzinga, 2008). For this to happen, the basic condition of trust has to exist or be built (Hirsch Hadorn *et al.*, 2008). Action research can occur throughout or in certain sections during the course of the research process. This may be at the stage when the researcher wants to gain an understanding of the problem, or when the problem is more closely examined and results are searched for, or at the stage of implementing of discussing results (Elzinga, 2008).

Meyer (2000) cites three core characteristics of action research. These include participation, which requires that those involved understand the need for change and are willing to actively involve themselves in the process. The second element is democratic impulse, which demands that all involved are seen as equal. The final element is for action researchers to explain their work in rich contextual detail, as the results and generalisations emerging from conventional science or academia, such as randomised controlled trials, do not adequately reflect the uniqueness of the situation. This last point, relating to conventional scientific practices such as randomised trials and surveys, needs to be emphasised as it makes clear the need for alternative research practices that are acknowledged and capture the complexity and rich knowledge not ordinarily acknowledged by science.

According to Streck (2017) action research can be said to be an exercise of moving beyond individual disciplines, whereas transdisciplinary research aims to go beyond the boundaries that keep knowledge within divided disciplines. At the centre of action research is the collaboration of a diverse group of stakeholders to promote change (and a parallel process of collective reflection), with the aim of ‘democratizing knowledge’ (Streck, 2017). The general consensus coming from practitioners and panellists at a transdisciplinary research international conference, is that they consider action research to be a subset of transdisciplinarity, and consider mode 1 research to not feature strongly in action research which leans more toward mode 2 research (“Action research or transdisciplinary research?”, 2010). These practitioners consider one of the strengths of transdisciplinary research to be that it has gained “both depth and identity, especially in diverse fields of philosophical discourse” (“Action research or transdisciplinary research?”, 2010: viii). What is clear is that there is overlap between action research and transdisciplinary research and that they share the aim of wanting to be solution-oriented.

Lang, Wiek, Bergmann, Stauffacher, Martens, Moll, Swilling and Thomas (2012) say that: “transdisciplinarity is a reflexive, integrative, method-driven scientific principle aiming at the solution or transition of societal problems and concurrently of related scientific problems by differentiating and integrating knowledge from various scientific and societal bodies of knowledge.” At the heart of transdisciplinary research, is the idea that many disciplines, including non-academic stakeholders, are incorporated into the research. These various viewpoints are used to provide a rounded view of the issue or occurrence and are integrated to produce findings. The core motivation for the research is to produce practical, implementable knowledge that supports the process of problem solving for the stakeholders involved.

The transdisciplinary approach enables a more democratic approach that allows for ownership of problems and solutions that have tangible benefit to the locals. In the words of Thompson (2017: 34): “by including, respecting, and valuing stakeholder and researcher perspectives on an equal level, co-created research could “empower people” to be interested, invested, and proactively involved in resilience research and

the problems it seeks to address”. This collaborative approach that works toward tangible and useful outcomes encourages participant self-efficacy and involvement that conventional, top-down research methodologies do not (Thompson *et al.*, 2017).

Often, many stakeholders that come from various backgrounds, and have different worldviews and attitudes are involved, resulting in many opinions around the value, type, and timing of engagements that should occur during the research process (Lang *et al.*, 2012). For example, even the term “participatory” research methodology can have a “plethora of meanings” (Felt, Barben, Irwin, Joly, Rip, Stirling & Stöckelová, 2013: 26). These individual opinions are likely to influence decisions, the direction of engagement, the way challenges are addressed, and the outcomes of transdisciplinary research initiatives (Pohl, Rist, Zimmermann, Fry, Gurung, Schneider, Speranza, Kiteme, Boillat, Serrano, Hirsch Hadorn & Wiesmann, 2010). Researchers interpret and implement transdisciplinary conceptions into practice in a variety of ways that are indicative of their personal opinions related to how, for example, interaction between stakeholders should take place (Felt, Igelsböck, Schikowitz & Völker, 2016). As the transdisciplinary research methodology intends, if actors are able to engage in a constructive manner, with the many worldviews and perspectives being acknowledged and accurately recorded, the result is diverse, well-rounded and rich research.

Producing knowledge in transdisciplinary projects is intertwined with many methods to recognise, understand and contribute to solving difficult real world problems (Pohl & Hirsch Hadorn, 2007). One reason for this could be that transdisciplinary science requires flexibility, and cannot define specific methods to be used in the various phases of projects. This attribute of transdisciplinary research is differentiated from conventional research practices that uses particular methods for different tasks (Brandt *et al.*, 2013). This thesis attempts to understand and record the perspectives of multiple individuals through a qualitative approach that involves methods including observation, as well as informal and formal engagements or interviews.

This research study touches on several fields of study including community development, corporate social responsibility, sustainable development, psychology of poverty, entrepreneurship, business ethics and more. This would ordinarily call for a number of researchers with numerous skill-sets. However, due to the fact that there are currently only two researchers in what has now grown and become known as the Renewable Energy for Transitions group, and due to budgetary, time and research scope constraints, the disciplines involved in the on-the-ground research work were limited. The author has a Bachelor of Commerce academic background, briefly worked in the social entrepreneurship sector and through this research is working toward the completion of a Master of Philosophy (Sustainable Development). The co-researcher has a Bachelor of Arts and sustainable development academic background, works as a researcher, and is currently working toward a Doctor of Philosophy degree, also in sustainable development. The co-researcher did not contribute to the

writing of the author's research study due to the fact that master's research is an individual project. Though it may not be material and was not quantified, the value of informal discussions and sharing of views between researchers likely contributed to a more well-rounded research study.

As this study forms an initial part of a broader series of work coming from a transdisciplinary research group (the RE4T), there was a need to deep-dive into understanding the problem and local context from multiple stakeholders' perspectives. This thesis therefore aimed to form an initial in-depth understanding of the local context, the challenges faced and existing opportunities, as well as to establish relationships. Time constraints meant that the researcher was not able to become involved in the implementation part of the transdisciplinary journey.

This researcher was fortunate to be able to spend a year-long period immersed in the REIPPPP network, making two trips to the local community in the Northern Cape. The author and research-partner were able to spend seven weeks in this rural region of the province, primarily based in one small town, but also travelling and spending time briefly in other towns. During this time, the researchers had more than 120 interactions which varied in length, structure and level of formality. Selecting the appropriate degree of 'formality' according to the stakeholder being engaged with, was important in this context, because individuals would respond very differently to different engagement approaches. These engagements became more selective as the study progressed and engagements usually consisted of discussions around personal history and background relating to the town or community and/ or insights from their professional careers. The research methods included semi-formal interviews, informal conversations, participant observation and field notes. Of the total engagements, 36 interviewees were cited, the majority of whom were from this local area. These engagements are summarised in Table 1 below. Most of the conversations that were cited were more in-depth and specifically related to the Northern Cape. The cited conversations were felt by the author to carry the sentiments of other, often brief, conversations.

Table 1 - List of Personal Engagements Cited

Engagement type	Stakeholder category	Number of personal engagements cited	Reference used in this study
Individual interviews	Local community (leaders and members)	10	Anonymous, 2016 g, i, l, n, o, r, u, w, af, ah
	Local government officials	9	Anonymous, 2016 a, b, h, k, m, q, v, x, aa
	Energy company representatives (technical and CSR)	6	Anonymous, 2016 c, j, p, s, t, ac
	Local business	4	Anonymous, 2016 y, ad, ag, ak
	National government official (including IPP Office)	2	Anonymous, 2016 d, e
	Mining company representatives	1	Anonymous, 2016 ai
	Individual total	32	
Group meetings	District level forum	1	Anonymous, 2016 ae
	Informal community gathering (soccer match)	1	Anonymous, 2016 z
	Local community meeting	1	Anonymous, 2016 ab
	Workshop	1	Anonymous, 2016 aj
	Group total	4	
	Total	36	

Transdisciplinary methodology attempts to frame and understand challenges in a radically different manner compared to the traditional scientific and academic research approaches that have been dominant in the past (Thompson *et al.*, 2017). Despite the positive intentions of the approach and its long history, having emerged around the 1960s and 1970s, few initiatives have been able to demonstrate transdisciplinarity that has been deeply incorporated, and that has lasted long periods – i.e. where projects have managed to achieve a process that is empowering and where there is co-creation (Brandt *et al.*, 2013; Lang *et al.*, 2012). A factor that contributes to the limited long-term continuity of transdisciplinary research projects is that, once they have begun, projects need to undergo a continuous process of balancing diverse knowledge types, and alignment toward producing useful

knowledge that contributes toward the collective aim (Brandt *et al.*, 2013; Thompson *et al.*, 2017).

There appears to be growing agreement around the concepts and framing of transdisciplinary research in academic literature (Lang *et al.*, 2012; Pohl & Hirsch Hadorn, 2007), but there is limited consensus and guidance around how transdisciplinarity should be put into practice (Brandt *et al.*, 2013; Felt *et al.*, 2016). This ambiguity around the implementation of transdisciplinary research allows for the practice to be moulded and adjusted by the stakeholders that participate, through a process of co-created research enabling potential innovations to be nurtured (Felt *et al.*, 2016; Thompson *et al.*, 2017).

Many academics propose a research framing that works toward tangible problem-solving objectives, which commonly consists of between four and six phases. These include defining the problem, analysis of the problem, participating in collaborative research, and using results (Brandt *et al.*, 2013: 2; Lang *et al.*, 2012; Pohl & Hirsch Hadorn, 2007). These high-level stages are abstract compared to actual tasks that will be executed, especially as each project requires acknowledgement of the unique complexity of every challenge and of the participants involved (Thompson *et al.*, 2017). In this study, each province is found to be vastly different, and each local community is also unique in terms of the social structures, attitudes held by the community, infrastructure available and ecological settings. Because of this, the research framing will be adjusted and shaped according to the needs, interpretations required by the challenges and the actors involved.

To realise these benefits, transdisciplinary research requires great time, energy and commitment on behalf of stakeholders, including the researchers and funding institutions, (Thompson *et al.*, 2017). Participants in Thompson *et al.*'s (2017) study acknowledged that the process of co-creating is complex, challenging, and takes time to get right. The most widely acknowledged practical difficulty was that these processes are time and resource intensive (Lang *et al.*, 2012; Stokols, 2006; Thompson *et al.*, 2017). Lang *et al.* (2012: 35) put it well when they say that: "It cannot be assumed that all actors have the capacity or continuous interest to participate in a given transdisciplinary research project that might continue over several years. Some actors might underestimate the time and energy necessary to participate in a meaningful way".

The researcher in this study fell victim to underestimating the time and energy commitment required, and as a result felt overburdened and struggled with the tension of engaging with stakeholders knowing that his time as a researcher in the REIPPPP community would likely be limited. As is evident, transdisciplinary research is more suited for research projects that are set up and will last for some time, and less so for short-term exploratory research. Though this study was short-term and exploratory, it

formed initial, baseline research that will become part of a greater body of work from the Renewable Energy for Transitions (RE4T) transdisciplinary research group.

The long-term relationships and trust, that needs to be developed and maintained in order to co-create solutions takes place over time, and also requires commitment by researchers. In this research project, the researcher was fortunate to be connected to various stakeholders in the REIPPPP through his supervisor, who then shared their networks, enabling the researcher to build a small network, thereby making access to individuals and information easier. However, these relationships were not maintained by the researcher on leaving the research setting and involvement in the REIPPPP. The researcher found that, during his engagement with various actors, that each had their own agenda that they wished the researchers would support them to fulfil. The challenge for the researcher was to be clear about what was in his power, what his role was, and to communicate this transparently so as not to raise expectations or cause harm in any other way.

As Thompson (2017) indicates, breaking down of hierarchical structures and power dynamics is another element of getting various stakeholders to work together. This was witnessed by the researcher through several district level forums which attempted to bring together a large variety of stakeholders involved in the REIPPPP, including local communities, national government, local government, renewable energy developers, local businesses, researchers etc., to share experiences and work together on issues related to economic development. It was common that certain stakeholders (such as the renewable energy companies) would not attend, unless other actors (such as Department of Energy representatives – the overseers of the REIPPPP) were to be in attendance. This reinforced power dynamics, limiting engagement between those that traditionally have power and those that do not, thereby limiting the forward momentum of such initiatives

Due to the large number of stakeholders that are often involved in transdisciplinary research projects, with their associated incentives, worldviews, power dynamics etc., a degree of sensitivity and skill is required in order to get such a diverse group to collaborate constructively. Thompson *et al.* (2017: 34–36) refers to these as ‘quality facilitation skills’ and describes key characteristics thereof – many of the concepts described here for successful transdisciplinary research are similar to those discussed further on relation to community engagement. Some of the elements a facilitator requires are discussed below, with further elaboration later in the study.

Genuine listening and respect for participants as equals can allow for researchers to gain valuable insight into local knowledge, and can be a way of allowing communities to feel listened to – potentially a first step in building trust. This can also give community members confidence that researchers will not adopt what Stokols (2006) calls a “hit and run” model of consultation, which can cause strained relations and frustration. It is critical, in the context of engaging with groups that have ordinarily

been overlooked, that they are integrated through a process that is transparent, and in a space that is safe for sharing ideas. Facilitators are often important in order to break down barriers between organisations that traditionally may not be able to engage with or listen to one another. Stakeholders also need to be conscious of using language that is simple and accessible to all and should avoid using labels to ‘box’ or classify others. In line with this, community-based or indigenous knowledge needs to be valued as much as traditional academic or disciplinary scientific knowledge. Regular feedback between stakeholders is also important for project participants to stay on course toward goals and to remain motivated.

Critics of the transdisciplinary approach argue that stakeholder engagement can simply be a positive sounding term that has the pretence of inclusiveness (Meppem, 2000). This can be used to strengthen pre-existing conclusions in order to reduce the influence of opposition forces (Miller, 1988). Furthermore, pseudo-participatory processes can be used by power-holders to manipulate or ‘educate’ those with less power (Meppem, 2000). These critics identify how a well-intended process can be manipulated to suit the needs of the powerful, and also the importance of critically reflecting on the concept of ‘participatory research’.

Participation and inclusiveness being loose terms that can be interpreted in a number of ways, means that there is a risk of processes defined as ‘participatory’ losing meaning. Elzinga (2008: 355–357) raises some critical questions to assist researchers to critically reflect: is your research a linear model of communication, or is there mutual communication and learning? Does your research reflect the views of the marginalised, or just the powerful? Who is listened to, excluded, and empowered? Do your research methods enable creative participation or only shallow participation? As the researcher, do you view yourself as an all-knowing and distanced expert, or as a participant with an equal voice to the others?

In this research process the researcher was able to engage in a two-way learning process, due to the researcher being able to share insights about the REIPPPP and about the Programme itself, especially to marginalised communities who knew little about it. The researcher was also able to engage with local community members through attendance of informal events, such as local soccer games, but the researcher acknowledges being clearly identified as an outsider resulting in conversations possibly not fully reflecting true opinions. The researcher did do his best to set aside preconceived ideas and to listen without interrupting, and without trying to extract certain opinions. The reality is that even though the researcher was able to develop close relationships with some of the stakeholders involved in the REIPPPP, the researcher was not able to empower those with limited power very much in a practical way, aside from sharing their voices in the research study and laying a small foundation for future research.

There are a number of contradictions associated with transdisciplinarity in the literature. For example, numerous drivers or incentives, be they financial, social or political, can direct the concept of transdisciplinarity in various directions at the same time (Russell, Wickson & Carew, 2008: 465). Similarly, transdisciplinary research can be considered a paradox, as it is simultaneously part of and separate from local research contexts, which poses challenges for practical implementation, and legitimacy (Polk, 2014). A number of academics have also noted that there is tension between traditional institutional structures and knowledge production models, that are incompatible with transdisciplinary values (Pohl & Hirsch Hadorn, 2007; Thompson *et al.*, 2017). This can have implications for stakeholders, be they researchers, local community members or funders that are not yet used to transdisciplinary practices. This can hinder participation or funding, slow process and ultimately limit the continuation of projects.

The difficulties of interdisciplinary engagement can be attributed to diverse quality criteria, which require various methodologies that cannot always be integrated. Engagement in the social sciences, and understanding the context of implementation, for example the many personal perspectives, political views, local capabilities and so forth, have been identified as important but previously undervalued for the creation of socially valuable outcomes (Buizer, Ruthrof, Moore, Veneklaas, Hardy & Baudains, 2015: 672).

Due to transdisciplinary research being fundamentally different from traditional, disciplinary academic approaches, it cannot be expected that the approaches have the same quality criteria (Hirsch Hadorn *et al.*, 2008: 5). Andr en (2010) summarises the aspects of good quality transdisciplinary research as follows:

- Active reflexivity: the ability of the researcher to reflect on their work in many aspects of the research process, including problem framing, ontological, epistemological, engagement with actors, integration of perspectives and theories.
- To be systematic and explicit: the researcher needs to systematically describe and assess the problem in way that is clear, and accurate inspite of the complex and changing social reality the researcher will be working in. It should be transparent what is being done, and how and why it is being reasoned.
- Flexibility and consistency: This criterion emphasises the need for collective engagement that is unbiased, and not rigid especially in relation to how exactly the research process is developed. However, there must still be a degree of consistency when following the various stages of the research process to avoid confusion.
- To show a good learning case: unlike traditional sciences, being able to generalise results is not a core quality criteria. As explained before, only some of the knowledge gained from the local and contextual knowledge can be

considered universal. Transdisciplinary research is fundamentally dependent on specific contexts, and intends to define real challenges using this local knowledge to support the process of resolving them.

- To communicate and to reach out: in the face of difficult and interconnected problems, additional pressure is placed upon the researcher to show an ability to be respectful and sensitive when engaging in the research context, where the researcher does not take a superior position. Furthermore, the researcher should also demonstrate high quality writing which, as part of contributing to social change should extend beyond the academic sphere, and the researcher should make an effort to get this work read.

1.6 Research Question

The transdisciplinary research approach discourages the researcher from entering the process with preconceived ideas or solutions drawn from academic analyses, but rather enables the researcher to enter the research context with an open mind and to listen closely in order to allow for possible solutions to emerge through engagement with local actors (Regeer & Bunders, 2009). The result is easy adaptation to change, limiting biasing findings, and that no predefined problems statement is required before the research process (von der Heyde, 2014). Instead, the problem statement and research questions would emerge during the investigative process, and integrate scientific and societal knowledge.

The primary research question can be articulated as:

How effectively do economic development efforts in the REIPPPP make long term improvements in the livelihood of low income communities?

1.7 Research Objectives

The core objectives of this research are to:

- Build an in-depth understanding of the complexity of the REIPPPP from multiple perspectives (systems knowledge).
- Gain a practical understanding of the current economic development initiatives in the REIPPPP, and the impact thereof, to form part of the foundation of this and future research (systems knowledge).
- Explore and document alternative forms of development initiatives that could improve the livelihoods of low income communities (target knowledge).
- Outline best practice principles relevant to community development in the REIPPPP, and more broadly, in South African low-income community contexts (transformation knowledge).

The term “effective” is defined by Oxford dictionary

(<https://en.oxforddictionaries.com>) as “successful in producing a desired or intended

result". In this case, the IPPs have the mandate to determine the intended outcomes of individual renewable energy projects, but within the bounds of broader objectives set by the IPP Office for the REIPPPP's economic development efforts. Due to the limited research done prior to the renewable energy programme, such as baseline assessments, and the limited time available to the researcher to create these assessments, it was a challenge to quantitatively determine to what extent the REIPPPP was effective from a developmental perspective. This limitation also meant that a more qualitative approach was necessary to determine effectiveness. This was done by capturing information from multiple stakeholders with varying motivations and interests in order to triangulate information and mitigate the influence of inherent biases held by stakeholders. The key sources of information were community members, local government authorities and renewable energy developer representatives.

The aim was therefore, through this exploratory research study, to document rich qualitative information that captures some of the complexity in the renewable energy sector in the Northern Cape, and not to be quantitatively and statistically focused. The primary focus can therefore be said to be heuristic, and exploratory as it aims to sufficiently understand the tensions that emerge in the development process in order to provide broad recommendations, as opposed to being prescriptive. The objective is not around the provision of a definitive evaluation of the effectiveness of the programme.

1.8 Literature Review

The primary aim of the literature review was to gain foundational understanding for further research, before venturing into the field research stage of the research process. A comprehensive literature analysis was completed as part of the transdisciplinary research approach, which provided thorough exposure to existing relevant academic work and critical theory. Literature specific to the economic development initiatives, specifically in the context of the Renewable Energy Independent Power Producer Procurement Programme, was limited at the time of writing due to the programme being relatively new. Journal articles and other such academic literature were limited, thus reports and articles publicly available on the internet were heavily relied upon for information about the REIPPPP in the literature review.

As a result of the limited information specific to Programme, a variety of related topics such as community development and corporate social responsibility efforts within South Africa and Africa were explored. What emerged through the literature review process and initial conversations with stakeholders in the REIPPPP was that there are many similarities between the mining sector in South Africa and the REIPPPP. Community development in the mining sector was therefore explored through the literature review and compared to current trends in the REIPPPP, and similarities and learnings documented. The analysis took place at Stellenbosch

University's central library, where the researcher accessed primarily online resources, and also physical resources. In particular, extensive use was made of the Stellenbosch E-Database (<http://library.sun.ac.za/>) to access the most updated information and, given the newness of the Programme, online search engines (e.g. <https://www.google.co.za/>).

1.9 Field Research

Through funding provided by the National Research Foundation through the researcher's supervisor, Professor Mark Swilling, as well as being connected to stakeholders within the REIPPPP by Professor Swilling, the researcher and research partner gained invaluable access to important individuals within the REIPPPP ecosystem. One of these included a senior official at the Department of Energy in the Gauteng Province, who provided insight into the challenges they face in trying to coordinate the REIPPPP, as well as monitor IPP's developmental spend. At a more grassroots level, the two researchers were able to spend more than seven weeks in a small, rural town in the Northern Cape, under the guidance of a senior municipal official who provided invaluable insight into the opportunities and struggles faced in areas such as these, as they were completely foreign to the researchers. Additional time was spent in the Eastern and Western Cape beneficiary communities with a small group of activists.

During this time, the four principles of transdisciplinary research outlined by Pohl and Hirsch Hadorn (2007), were adhered to closely. The first of these principles is that of reducing complexity, which states that it is necessary to reduce the complexity of a problem so that a research question may be established, but not so much that the depth of the problem is lost. The second principle, the principle of contextualisation, suggests that the problem should be contextualised within the real world, and also within the scientific context, in order to make results accessible to relevant stakeholders, and to contribute to practical problem solving. The principle of open encounters is the third transdisciplinary principle which emphasises the importance of co-creation and collaboration between a multitude of actors from many sectors in society, allowing them to come to a shared, robust and diverse understanding of the problem. The researcher is required to remain open minded, withhold his own ideas or opinions, and listen closely to all perspectives as equally important. The fourth principle is recursiveness, and is required for transdisciplinary research to achieve its goals of capturing the complexity of a problem, create knowledge that is solution-orientated, and specific, scalable and transferrable to other settings. According to this principle, one way of improving the probability of achieving these goals is to, after every solution is implemented; take uncertainties or limitations of initial results as learnings, not hindrances, thereby taking a recursive approach to the research process.

Though the transdisciplinary research process is explorative in nature, and therefore has no rigid methodology, the guiding principles outlined above translate into several

more practical approaches relevant in the day-to-day thinking required during the research process.

1.9.1 Allowing for Emergence

“[Transdisciplinary research] is appropriate in contexts characterised by high levels of social fluidity. A core element of this approach is that the research process is designed as it unfolds” (Breda *et al.*, 2016: 4). This requires solution-focused researchers to allow the research design to unfold as the research process occurs, and not be defined beforehand. This means that researchers need to be open to “unexpected intellectual and conceptual sojourns” to “explain and deal with emergent insights from the research process” (Breda *et al.*, 2016: 5). In the case of this research project, the researcher entered the research process without expecting to discover certain things, and without a concrete plan, but rather decided to be guided by conversations with stakeholders in the REIPPPP.

1.9.2 Immersion

The researcher had the opportunity to be immersed in the REIPPPP context over a period of a year, of which more than eight weeks were in mostly rural IPP communities. During this time the researcher attempted to suspend all judgement and preconceived ideas related to possible solutions for communities, and instead attempted to listen attentively during engagements with individuals that had some connection to the REIPPPP (these ranged from municipal officials, to IPP management, IPP economic development officials, officials from National Treasury, academics, to members from beneficiary communities).

As outlined by Regeer and Bunders (2009), this process allows for greater understanding about, and solutions to, real and complex challenges. Solutions can only be found through a process of learning that occurs through engagement with a variety of stakeholders. The embedded engagement time allows for a real understanding of the current situation from multiple angles, due the diverse group of individuals engaging at various levels of the REIPPPP. In excess of 68 conversations were had across four provinces, with the primary focus being in the Northern Cape, in order to inform this research.

1.9.3 ‘Illegitimate’ Stakeholder

Part of suspending judgement and listening closely also means listening to those who are not ordinarily considered in academic research processes, which Breda and Swilling (2016) refer to as ‘illegitimate’ stakeholders. These individuals are defined by Breda and Swilling (Breda *et al.*, 2016: 14) as “one who has a stake in the outcome but has not been legitimated by significant others (i.e., not accorded status)”. In developing country contexts this often refers to the poor, engagement with whom requires a relatively unconventional approach, and a degree of sensitivity. It can be generalised that the poor are often ignored, both by their fellow wealthier counterparts in day-to-day living, by government, and by academia. This became apparent through

the research process, where individuals from low income communities commonly withheld their own thoughts, and preferred to listen and nod their heads in agreement, providing some insight into the entrenched power dynamics and feelings of insignificance that exist among economically challenged communities.

1.9.4 Co-creation of Knowledge

The process of immersion, withholding judgement and preconceived ideas, showing respect, humility and a genuine interest encourages a different type of engagement process, compared to, for example, engaging the poor with a clipboard and questionnaire. Demonstrating respect for all actors equally can limit the flow of knowledge in one direction, or what Regeer and Bunders (2009) refer to as the “deficit model”. They articulate this as “the idea that specialist knowledge needs to be transferred to laypersons and that they, in turn, do not have any knowledge to transfer back to specialists” (Regeer & Bunders, 2009).

In unequal societies such as those in South Africa, creating knowledge requires reaffirming that invaluable knowledge exists among the poor (Breda *et al.*, 2016; Wickson *et al.*, 2006). “This process of doing science with society happens not only between scientific experts from the different social, natural, humanities, and administrative science disciplines, but also, very importantly, with relevant social actors and their practical knowledge systems and understandings of the problem situation(s) at hand” (Regeer & Bunders, 2009). The importance of “[co-producing] socially useful knowledge with the most marginalised and poorest sectors of society” becomes clearer when defining the two types of knowledge (Swilling *et al.*, 2013: 11).

The first type of knowledge is that created by those who live in a particular set of circumstances, and have an intuitive, experiential understanding of their everyday context. The other type of knowledge that is produced by scientists and academics is theoretical, analytic and abstract (Pohl & Hirsch Hadorn, 2007; Wickson *et al.*, 2006). The transdisciplinary research process allows for these knowledge sets to be merged, and by so doing provides a depth of understanding around the complexity and diversity of the context in which the researcher is embedded, thereby enhancing our ability to solve problems, as well as the potential for mutual learning (Pohl & Hirsch Hadorn, 2007).

“In this way, research get connected to the social will of the powerless rather than the political will of the powerful” (Swilling *et al.*, 2013: 15). For research processes to truly be representative of reality, significant time is required to be invested into communities where organic and unpretentious engagement processes allow for meaningful relationships to be built, which in turn lays the foundation for co-creating knowledge.

1.9.5 Micro-experimentation

Micro-experimentation is another element of the research process that the researcher regretfully could not explore fully, due to the personal time constraints associated with the research journey. The decision to discontinue with the research and unembed from the research context, especially after many meaningful relationships were made, was a difficult one, and sat uncomfortably with the researcher. Though nothing like the iShack Project, which remains the epitome of what transdisciplinary action-research can be, was initiated, the researcher hopes to have embodied the majority of transdisciplinary research principles and in so doing laid at least a partial foundation for future researchers and other stakeholders involved in the REIPPPP.

1.10 Collective Case Study Research

In keeping with the overarching transdisciplinary research methodology, and wanting to produce useful knowledge, two sets of case studies are used to document the research findings. The first set outlines and compares existing cases of community development efforts in the REIPPPP by looking at three IPPs' efforts in the Northern Cape. This is known as systems knowledge, that which currently exists. The second set of case studies is used to summarise examples of highly effective community development efforts identified primarily through a desktop research approach. These case studies demonstrate target knowledge, or that which should be. Comparing these two knowledge sets allows for the creation of transformational knowledge, the understanding of what needs to happen to shift from systems to target knowledge.

The case study component is used as it is an effective approach to comprehending the subtleties of complex situations within their settings or contexts, and allows for deep examination of phenomena that go beyond theory (Association of African Planning Schools (AAPS), 2010; Baxter & Jack, 2008; Bryman, Bell, du Toit & Hirschsohn, 2014). Taking into account that literature around the REIPPPP is emerging, and that a core aim of this research is to produce socially useful theoretical and practical knowledge, the case study approach is an appropriate tool for effectively capturing learnings from cases within the context, and from cases that have proven to be successful in their community development efforts.

Multiple case studies are also useful for “comparing and contrasting the findings from each of the cases. This allows researchers to consider what is unique and what is common across cases, and to reflect on the theory emerging from the findings” (Bryman *et al.*, 2014: 113). In addition, case study approaches also allow for various qualitative methods to be used, reducing the dependency on a single research method (Knights & McCabe, 1997). As such, a combination of desktop research, participant observation, semi-structured interviews and informal engagements are employed for both sets of case studies. Using these multiple sources supports the creation of research that can be applied generally, and is externally valid (Bryman *et al.*, 2014).

1.10.1 Northern Cape IPP Case Studies

Information gathered from the field research and informed by the literature review, was documented using a multiple case study approach, consisting of three cases, all from the Northern Cape Province. These were chosen as, despite being within the same geographic region, IPPs were taking vastly different approaches toward fulfilling their ED commitments within each community. The case studies aim to illustrate, with some level of depth, the attitudes various companies have, and how these affect practices at a ‘grassroots’ level, as well as the mentalities and social complexity that exists within low income communities. These case studies are then analysed, and compared to one another, in order to distil themes and learnings that can be taken forward.

The purpose of this study is not to produce statistically significant information, as could be extracted from a large data set research. Instead, the research takes a more qualitative approach that focuses more intensively on few cases, thereby taking a more descriptive and explanatory route, whereby the case study expands on trends found in the literature review, and provides a more detailed understanding of these emerging phenomena (Bryman *et al.*, 2014). An interpretative or ‘alternative approach’ is used, which aims to create a detailed, rounded understanding of IPPs’ development efforts. These approaches are closely tied to their contexts through using several avenues of collecting data, in order to unearth varying interpretations and understandings (Piekkari, Welch & Paavilainen, 2009). The data collection methods for these cases include participant observation, direct engagement with stakeholders, and desktop research, the combination of which contributes to the reliability of data.

1.10.2 Best Practice Case Studies

To produce socially useful knowledge, a second set of case studies is used to better understand elements of success in ‘effective’ community development initiatives. Development efforts are considered effective if they have two core elements, which emerge as vital to development initiatives from the literature review and Northern Cape case studies. These elements included a creating a positive impact in the lives of low income communities, and doing so while ensuring some level of continuity to promote long-lasting impact. For at least some degree of continuity to exist, initiatives should not be deeply dependent on donations/grant funding, and therefore commonly take the form of a user-pays model, where founders of initiatives often spent significant periods of time in communities to understand the complexities and real needs. Initiatives are only considered if they are from developing countries, to ensure relevance, and if there are at least three independent sources of data available (of which development project’s website could be one), to ensure access to reliable data.

1.11 Chapter Outline

Chapter 1 gives an overview of the transdisciplinary research methodology theory as well as the manner in which it was implemented (and challenges that were faced) during the research process for this thesis. Chapter 2 consists of a literature review that provides an overview of the problems faced in South Africa and, in response, the hand-out or aid approach commonly taken by governments, corporate social responsibility (CSR) programmes, international aid organisations and non-governmental organisations. Specifically, this chapter focuses on understanding the history of CSR initiatives in the mining sector, and comparing learnings from this established sector to CSR initiatives starting to take place in the REIPPPP. Literature on key themes emerging from this comparison is then further explored. These themes include community development theory, psychology and poverty theory, as well as enterprise development theory. The third chapter further delves deeper into understanding the economic development initiatives by contrasting findings from three IPP projects which demonstrate significantly different ways of engaging with beneficiary communities. Chapter 4 provides a summary of five best practice examples of development initiatives from around the world. From these, lessons and recommendations are drawn that are relevant to economic development projects in the REIPPPP. The final chapter, chapter 5, concludes the thesis by outlining the aims of the research, the main argument and limitations that could be addressed by future research studies.

2 Chapter 2 – Corporate Social Responsibility (CSR) in rural South Africa: reviewing the utility-scale renewable energy and mining sectors

2.1 Introduction

The previous chapter provides theory regarding the transdisciplinary research methodology, describes why it is appropriate for understanding real-world challenges, and explains how it is practically used in this study, as well as expounding on difficulties faced by the researcher. The next step in the process is to understand more about the purpose of CSR, and why CSR or corporate community development is important, especially in South Africa's rural regions, and how effective corporate efforts in the rural parts of the country have been to-date. To show this, existing literature is reviewed starting with literature related to the community development efforts in the REIPPPP. The utility scale renewables industry is still immature (in terms of its community development practices) and development efforts in this sector have not been well documented. Due to the limited literature available, the literature review expands and shares learnings from the South African mining sector's social responsibility efforts, an industry that shares similarities with the renewable energy sector. The comparison between these industries produces insights that call for further literature related to community development to be reviewed.

This literature review posits that the limited impacts realised despite significant sums of money being poured into developmental efforts in Africa, are due to several fundamental reasons. The first is due to corporates often being more interested in reducing risk and promoting brand image than alleviating social ills. A disengaged and ineffective community development approach is taken through which quick-fix, hand-out, feel-good type projects are funded. This addresses surface level problems that exist in low-income communities, and not the deeply ingrained psychological issues and mental barriers that are at the centre of the more obvious and tangible difficulties they face, and that limit their ability and will to take charge of their own development. Another criticism of development efforts is the limited consideration given to the long-term continuation of projects, from both a funding and manpower perspective. This chapter therefore argues that development practitioners should place increased importance on effective community development practices, understanding the psychology of poverty, and incorporating a degree of enterprise in development initiatives.

2.2 Background

Since South Africa's independence in 1994, little progress has been made in terms of economic growth, inequality, poverty, unemployment, carbon emissions and ecological destruction. Put together, these elements make up the notion of sustainable development which government, through its many policy documents, claims to be working toward (Department of Economic Development, 2011; National Planning

Commission, 2011; Rennkamp, 2013). The difficulties faced are complex and deeply ingrained in the socio-economic system and though national government has been criticised as a limitation to progress, government cannot be the only contributor to the prosperity of the country. Corporations have a role to play as employers, and have a corporate social responsibility (CSR) mandate to fulfil.

Having emerged from a system of imposed racial oppression over two decades ago, the country has struggled to recover, and is plagued by a plethora of economic, political, social and ecological difficulties. A corrupt political system, social instability and slow economic growth resulted in downgrades by the major credit rating agencies to near-subinvestment grading (Naidoo, 2017). The country also has, relative to the size of economy, high per capita carbon dioxide emission figures – 8.8 in 1994 and 8.6 in 2011 (The World Bank, 2016). According to The World Bank (2016), inequality has worsened according to the Gini coefficient (0.59 in 1993 and 0.63 in 2011) and unemployment rates have remained consistently bad (the official rate was 22% in 1994 and 25% in 2014, whereas the expanded unemployment rate was 35% in both years) and are worse for youth (Statistics South Africa, 2014). Poverty rates improved, but only superficially, as these improvements can be attributed to government welfare grants (Khan, 2013).

Khan (2013: 580) therefore asks: “for how long can the South African elite continue nourishing a bioeconomy that divides and privatises, dispossesses and externalises? How much longer can the elite keep a lid on the rebellion and revolt this bio economy produces?” In a country which is perpetually faced with protesting groups, two major events demonstrate this growing frustration and restlessness. These are the Marikana massacre in 2012, in which police killed 44 striking miners, and the more recent, recurring nationwide tertiary student ‘Fees Must Fall’ protests which resulted in the shutting down of universities for several weeks in 2015 and 2016. Part of the problem is that the legacy of Apartheid has left behind immense power and wealth imbalances (Cronjé & Chenga, 2009; Swilling, 2010).

Historically, South Africa’s electricity has been produced by large coal power stations and, due to overinvestment and poor planning in the 1980’s, excess supply existed, resulting in low prices (Deloitte, 2012). Due to the country rich mineral and coal reserves, the excess electricity was taken up by the energy intensive mining industry. This Mineral Energy Complex (MEC), as it became known, embedded itself within the economy’s structure due to its contribution to economic growth and provision of employment (Moeti, 2013). Under the Apartheid regime, white capitalists took control of the mineral resources and not only exploited the country’s natural systems, but also the black population, which is vividly described by Khan (2013: 581) as the “elite feeding off the battered and broken bodies of the poor”. This trend of the concentration of wealth in the hands of the few, and the whittling down of the poor to a mere labour force continues, and is not exclusive to the mining industry, or to South Africa. Corporate executive officers of companies listed on the

Johannesburg Stock Exchange earn, on average, 140 times more than the mean income, with the largest gap of 725 times existing for a food retailer (Bronkhorst, 2014). The result is that South Africa is 5th on the list of countries with the biggest pay gaps, and these differences are considered acceptable, and allowed (Bronkhorst, 2014).

In contrast to what is presently the case, there are a number of commonly cited ways forward. Sustainable development and the low carbon, green economy are declared as guiding principles that should be followed in many of the country's strategic plans, including the National Framework for Sustainable Development (2008), the New Growth Path (2010), the National Strategy for Sustainable Development Action Plan (2011) and the National Development Plan (2011). Though commitments have been made in these and many more strategies, implementation has been problematic (Rennkamp, 2013).

2.3 The Developmental State and Social Welfare

A developmental state is one in which government takes on the role of the primary leader of economic and social development, while promoting inclusivity of the private sector and civil society. The focus of such a state should be on developing human capacity, and on building, protecting and promoting human wellbeing (Patel & Mushonga, 2014). The state should facilitate collaborative efforts and formulate enabling policies in order to promote progress (Patel & Mushonga, 2014).

Instead, what is seen more prominently from the South African government is a social welfare approach in which programmes are simply a vehicle to gain votes from the black poor and to momentarily ease the bitter reality and hide the absence of necessary structural reform (Khan, 2013; Mbeki, 2009). Such practices of development assistance, by government or through international aid, are more often than not anti-developmental, and create deep dependencies by diminishing (or not encouraging) capabilities for continued self-sufficient advancement (Khan, 2013; Moyo, 2009; Peet & Hartwick, 2009). Si, Yu, Wu, Chen, Chen and Su (2015: 130) refer to these hand-outs as “external supports to alleviate poverty [that are] now viewed as the often embarrassing model of governmental nation-to-nation outright grants on a very large scale”. Lombard (2003: 225) further explains why this thinking at national level is concerning: “The fact that the South African government regards the social grant system as “...the most effective tool in alleviating poverty” (Skweyiya, 2002 and 2002 Budget Speech) is also not helpful in making this shift. Although the social grant system protects vulnerable individuals and families, its long-term sustainability needs to be questioned. Social grants cannot be a permanent option for unemployed families, neither from an economic burden viewpoint, nor from the perspective of the beneficiaries' self-esteem. In fact, long-term receipt of social grants will only contribute to the further social exclusion of the poor.”

Hamann and Acutt (2003) note the general trend of governments having a diminishing level of control over the private sector, which is in part due to the emergence of multicontinental corporations so vast that their revenues are comparable to the GDPs of small countries. Corporations taking on what was previously a function of the state, such as large-scale energy production, are one example of the growing capability and reach of companies, which has resulted in huge efficiencies, but also control by privately owned multinational utilities. With their increasing role in the economy, it becomes even more vital for the private sector to support development, especially in a developing country context. According to Patel and Mushonga (2014: 52), “the RDP [Reconstruction and Development Programme] articulates the need to harness the financial contribution of the private sector as government realised that it could not single-handedly accomplish the depth and breadth of the country’s development challenges”.

The RDP and the earlier Sullivan Code of 1977, thus emphasise the importance of corporate social responsibility s

2.4 The Role of Business and CSR

For governments in developing countries, CSR-focused multi stakeholder relationships can be a cost efficient way of bolstering rural development strategies in areas where there is limited capacity (United Nations Office of the Special Adviser on Africa, 2004). However, implementation and results from CSR are still vague, the agenda has not yet matured and there are questions related to partnerships around accountability, legitimacy and incentives (United Nations Office of the Special Adviser on Africa, 2004).

The World Bank’s definition of CSR is “the commitment of business to contribute to sustainable economic development by working with employees, their families, the local community and society at large to improve their quality of life, in ways that are both good for business and good for development” (World Bank, 2004). The European Commission (2001: 4) defines CSR in a similar way: “Corporate social responsibility is essentially a concept whereby companies decide voluntarily to contribute to a better society and a cleaner environment”.

At the heart of CSR is the idea that companies can and should integrate sustainable economic development concerns into business operations and in their interactions with stakeholders, but these actions are only voluntary (Christian Aid, 2004: 4). There should be a move towards complying with legal requirements and minimising harm through engagement and creating social value (Jamali & Mirshak, 2007: 243–244).

To sceptics, CSR can be considered businesses giving back only after they have taken more than they should have in the first place (Semler, 2014). To others, CSR can be considered against business practices as it takes attention away from the core mandate of businesses – that of wealth creation (Murray, 2005). Those in favour of the concept of CSR consider it to be an important way for businesses to look further than the

narrow focus of financial returns, and take broader society into account (Jamali & Mirshak, 2007).

Broadly reflecting on CSI efforts in South Africa thus far, Faurie's (2011) interviewee Rossouw, a corporate social investment (CSI) consultant asks: "If R50 billion is not lifting people out of poverty, how much will?" and "Are companies doing it incorrectly? Or are the challenges too severe?" Moyo (2009: xix) echoes a similar sentiment and quotes the amount of development-related aid flowing from wealthy countries into Africa at US\$1 trillion over the past 50 years, with little evidence of this being effective. According to Trialogue (2017) the total CSI expenditure in 2017 was R9.1 billion, of which 32 percent is attributed to have come from the mining and quarrying sector.

Much of Africa's poorest live in rural areas, and are dependent on agricultural practices to survive. Agriculture and associated services appear to be especially effective in reducing poverty, with industrial growth being less effective (United Nations Office of the Special Adviser on Africa, 2004). The question is not whether development efforts should be supported, but rather 'how' to catalyse rural social and economic progress (United Nations Office of the Special Adviser on Africa, 2004). In their recent report the United Nations' Food and Agriculture Organisation (FAO) (2017: v-vi) states that the key to achieving sustainable development is to transform rural communities, and promote agriculture: "fulfilling the 2030 [Sustainable Development] Agenda depends crucially on progress in rural areas, which is where most of the poor and hungry live... inclusive rural transformation would contribute to the eradication of rural poverty, while at the same time helping end poverty and malnutrition in urban areas".

The mining sector, one of the industries upon which the country's foundation lies, which has operations in rural regions and a mandatory CSR obligation to surrounding communities, has the opportunity to support this rural transformation. The newly emerging utility scale renewable energy sector, through the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), also has a community upliftment obligation. Through this programme, IPPs are required to spend a portion of revenue on low-income communities within a 50-km radius of renewable energy plants.

Through this research CSR, economic development or community development practices in both these industries are interrogated in order to highlight strengths and expose weaknesses. in the hope of transferring learnings from a well-established industry to a newly emerging one. The South African mining sector has a history, now more than two decades old, of community responsibility that evolved over time. In contrast, the large scale renewable energy industry is only now starting to fulfil commitments after the first renewable energy projects started generating revenue – this was after the Programme's inception in 2011.

Significant similarities between these industries are that both are located in rural regions of the country, and that both have been mandated by national government to support surrounding rural community development in a manner that is left to their discretion. The mining and renewable industries, both have a long-term presence in rural areas. The renewable energy plants in the REIPPPP will exist for 20 years and possibly longer, whereas mining operations at a particular site can continue over several decades. Furthermore, the companies are commonly owned by large, multinational corporations that have extensive experience in their respective fields. The primary focus of this study is to understand how effective these development efforts have been in supporting the country's transition toward more sustainable forms of development, and how development efforts can be improved. This study, being primarily heuristic, aims to explore the tensions and challenges that emerge through this process, as opposed to providing exact assessments of 'effectiveness' and 'meaningful' development and specific steps that could be taken in response. Instead, the focus of this study is to capture rich qualitative stories that give insight into the way that development processes unfold, and because each situation and context differs, the study will conclude with broad recommendations.

In this research, development initiatives are broadly considered 'meaningful' or 'effective' if they result in improvement in the wellbeing of communities they intend to serve, and if these improvements are likely to continue for the foreseeable future. 'Wellbeing', or 'quality of life' (per the earlier definition), are broadly considered to consist of the six categories described by Burt (2013): income and employment; health and environment; housing and infrastructure; education and culture; organisation and participation; as well as self-awareness and motivation. Improvements in any of these categories that could be seen or are described by the community are considered tangible or impactful. If these improvements are long-lasting and realistically expected to continue into the foreseeable future without being dependent on external parties, they are considered meaningful.

Weyers (2007: 11) in a review of twenty-four community development articles, refers to common factors that constitute community members being 'substantially better off' these being: material and infrastructural benefits, social benefits, self-esteem benefits and self-actualisation benefits. However, it must also be acknowledged that various criteria can be used to define effective development by various spectators. Some organisations measure progress using quantitative indicators which often reflect technical competence, for example the number of homes built, but such narrow indicators should not be considered the most accurate measure of the impact of community development efforts (Litwin, Lansberry, Slotnik & Vaughn, 1994).

Litwin *et al.* (1994) broaden the definition of what effective development can mean and go beyond easily quantifiable elements such as money, physical structures, or having basic needs met and begin to highlight the importance of less quantifiable

elements such as a sense of community, and psychological wellbeing. Litwin *et al.*'s (1994) expanded definition begins to draw linkages with the notion of what sustainable local communities could look like in the real world: The most obvious characteristic of a successful community development effort is that the sum of the efforts is greater than the parts: the neighbourhood as a whole looks, feels, and acts different to everyone who lives, works, and visits there. Not only are the immediate needs many of poor families' met – decent, affordable housing, access to job training and education, nearby health care, and so forth – but momentum has built within the neighbourhood that enables the people within it to sustain and build on the changes that have occurred. The neighbourhood has become a community increasingly controlled by the people who live in it.

Bamber *et al.* (2010: 15) caution against the use of the term 'effectiveness' because processes that are commonly deemed effective have not “involved testing the results against a ‘counterfactual’ – that is, for instance, exploring whether the observed changes in communities might have happened without the additional input provided by the programme under consideration”. For that reason, per their suggestion, the term 'effective' is used in the same way the term 'promising' or 'likely cause' are used within the broader social sciences.

2.5 The Aims of Development

There is a great deal of overlap between the intentions of Corporate Social Responsibility, community development or social work, and national development objectives. Midgley (1995: 25) defines development as “a process of planned social change designed to promote the well-being of the population as a whole in conjunction with a dynamic process of economic development”. Peet and Harwick (2009: 1) define development as “making a better life for everyone. In the present context of a highly uneven world, a better life for most people means, essentially, meeting basic needs”. Development efforts, or at least a part thereof, should be focused on supporting the most vulnerable in society to improve their quality of life, or at least as mentioned above, meet their basic needs.

In this study, several terms are used to describe such communities, including 'the poor', 'low-income', and 'most vulnerable'. These are individuals or groups of people that are 'poor' or in 'poverty' per the following definitions. As stated by the United Nations (Lombard, 2003; United Nations, 1999: 8) the poor define their own needs as a lack of: adequate income, food, water, land, productive resources, revenue creation skills, access to markets, economic information, bargaining power, resources for emergencies, protection against to disease and illness, access to healthcare and a lack of political power. Furthermore, poverty is commonly associated with social difficulties such as weak family links, adults and children engaged in illegal activities, including substance abuse (Republic of South Africa Department of Social Welfare, 2007). It is this combination of financial, social and emotional impoverishment that

worsens how vulnerable low-income individuals and their families are (Republic of South Africa Department of Social Welfare, 2007).

Development efforts should therefore acknowledge that poverty is a broad, multi-dimensional, complex challenge that has multiple social, economic elements (Burt, 2013; Lombard & Strydom, 2011). Economic growth on its own is not a certain way to reduce poverty, or in the words of Green (2008: 189 in Lombard & Strydom, 2011), “economic growth is an essential way to tackle poverty and inequality, but the quality of that growth matters as much as the quantity. Development strategists can seek to manage growth so that it maximises human welfare”. This is echoed by Sen (2007: 3–4) who states that: “We have every reason to want economic growth, not for its own sake, but as Aristotle put it, for the sake of something else, to wit, the bettering of human lives. We have to look beyond economic advancement. This is where social development provides a fuller and more far-reaching perspective than economic development seen on its own can possibly provide... if we do not pay adequate attention to social development, then the rewards of even very high rates of economic growth can be far less than they could have been with well aimed social policies and practices.”

Over the past decades, mankind experienced tremendous resource and energy intensive economic growth that has resulted in significant material progress, especially in developed countries (Krausmann, Gingrich, Eisenmenger, Erb, Haberl & Fischer-Kowalski, 2009; Sachs, 1999; Swilling & Annecke, 2012). In addition to the inequality resulting from this system, “during this period, environmental constraints to human activity were often not fully recognised. The world is now experiencing a growing number of undesirable consequences as continued economic expansion and resource exploitation threatens the stability of natural systems” thereby also posing a threat to human livelihoods, especially the poor who are particularly vulnerable (Coudouel, Hentschel, Wodon, Yitzaki, Prenzushi, Rubio, Subbarao, Christiaensen, Scott, Achikbache, Belkindas, Dinc, Eele, Swanson & Fo, 2002; National Planning Commission, 2011: 198). In the South African context, the country’s mineral wealth was exploited with little consideration for ecological consequences (National Planning Commission, 2011; Sorensen, 2012).

According to the NDP, the “developmental challenges must be addressed in a manner that ensures environmental sustainability and builds resilience to the effects of climate change, particularly in poorer communities” (National Planning Commission, 2011: 197). So far, there has been little to no evidence of concern being displayed for environmental impacts resulting from CSR initiatives. It appears, therefore, that the conventional approach to development is being followed at this grass-roots level. If the goal in community development is to support the creation of sustainable, resilient, self-reliant livelihoods for the low-resource communities, development efforts should be done in a way that maintain and even restore ecological balance, and ensure natural

resources are not overused (Centre for Applied Legal Studies (CALs), 2016; Coudouel *et al.*, 2002; Harris, 2000; Sachs, 1999; Westley, 2013).

This needs to be done as far as possible at every level of community upliftment efforts, whether it is the creation of a development project, the provision of basic services, or setting up an enterprise (Coudouel *et al.*, 2002; Parrish, 2010; The 4th Barefoot Guide Writer's Collective, 2015). Effects for ecological systems need to be considered before deciding on which initiatives to pursue, from the sourcing and transportation of inputs, to the way things are produced, and even how they are disposed of (Harris, 2000; Hopwood, Mellor & O'Brien, 2005; Parrish, 2010; Sachs, 1999). The environmental impact along the entire lifecycle of projects needs to be considered, and any negative impact minimised.

Development is often considered synonymous with gross domestic product (GDP) growth. Peet and Harwick (2009) explain that GDP growth refers to growing the economy through producing more goods and services, and increasing total income. Swilling and Annecke (2012: 52) summarise the assumptions and attitudes associated with the market economy in its current form:

“The last two decades were dominated by economic theories which assumed that free markets, unregulated capital flows and cheap resources would result in more equitable outcomes for developing country economies (especially the resource-rich ones). As these theories lose their positions of policy influence and evidence mounts that the resulting policies reinforced the ransacking of global resources for the benefit of the global over-consumers, we have an opportunity to rethink economic development theory and strategies in light of the twin challenges of persistent poverty and the need to accept that there are in fact ‘absolute limits’ to the natural resources we can consume and use for human benefit.”

However, this form of development or measure of progress can benefit a minority without making improvements in inequality and poverty levels. This universally accepted development model of using gross domestic product as a measure of progress, which is entangled with Western culture and tradition, uncritically accepts the competitive market, jobs and global integration, rationalisation and logic as the mental model, as well as mass consumerism and catching up to developed countries as goals (Goerner, Lietaer & Ulanowicz, 2009; Heideman, 2011; Peet & Hartwick, 2009; Pieterse, 2001; Van Schalkwyk, 2015; Du Toit, 2004). Du Toit (2004: 1006) outlines why this can be dangerous: “these assumptions produce a risk of harmful and counterproductive policy-making. The danger in the uncritical and unreflective adoption of optimistic modernizing narratives is that, in passing over the complexities of the dynamics that keep poor people trapped in poverty, they make the targeting of poverty policy much more difficult”.

This model is based on conquest, exploitation of peasants, and plundering the planet of resources by colonialists and capitalists (Harris, 2000; Mbeki, 2009; Peet & Hartwick, 2009). In many ways this is still the case, with the existence of impoverishment alongside, and made worse by, the accumulation of wealth by a minority (Africa Progress Panel, 2013; Mbeki, 2009; Du Toit, 2004). Often, conventional theory sees this as acceptable, and considers poverty but an unfortunate outcome of growth which benefits the majority and that can be solved by fast growth and charity (Peet & Hartwick, 2009; Van Schalkwyk, 2015). Pieterse (2001) sees this unequal development as a reality of capitalism. In addition to the social inequality that results from this development model, other failures that commonly result from the pursuit of American-style consumption driven happiness include cultural insensitivity, eco-system degradation, global warming, peak oil, urban poverty and food insecurity (Peet & Hartwick, 2009; Sneddon, Howarth & Norgaard, 2006; Swilling & Anneck, 2012; World Economic Forum, 2015).

The criticism is therefore not specifically against 'economic growth' as a concept of producing and consuming goods, but rather against the non-reflective production and consumption without concern for the way wealth is distributed in society, and without concern for the ecological impact thereof. Much can be learnt from the modernisation process which developed countries have undergone, and appropriate changes can be made. The words of Peet and Hartwick (2009: 281) "we have seen the future, and we know it only partly works" are a cue to take a slightly different development approach.

This alternative development has several names, which all have similar principles, including self-reliance and endogenous, equality, participation, agency, environmental sustainability and improvements in wellbeing (Peet & Hartwick, 2009; Pieterse, 2001; Swilling, Musango & Wakeford, 2015). The aims of this alternate form of development are fundamentally the same as mainstream development, but pay particular attention to social justice (in terms of the equal/ fair/ distribution of wealth, opportunities, and privileges), and ecological sustainability in addition to economic surplus. This form of sustainable development, also known as sustainability, or what Swilling and Anneck (Swilling & Anneck, 2012: 46) refer to as a 'just transition' can be defined as follows: "... the challenge of sustainable development in the current global conjuncture is about eradicating poverty, and doing this in a way that rebuilds the eco-systems and natural resources on which we depend for our collective survival. An argument that is pursued in this book is that poverty eradication through a more equitable distribution of the world's resources can only be achieved if ways are found to restructure the global economy."

This form of development, practically, can translate into thinking and living locally, striving toward simple and spiritual living as opposed to conspicuous consumption driven by advertising (Harris, 2000, 2003; International Institute for Environment and Development (IIED), 1992; Sneddon *et al.*, 2006). To achieve this, change is

required: “poverty eradication through equitable distribution of the world’s resources can only be achieved if ways are found to restructure the global economy”, and “doing this in a way that rebuilds the eco-systems and natural resources (Swilling & Annecke, 2012: 46). It has broadly been agreed that there are three core aspects of ‘sustainable’ development (Blewitt, 2008; Harris, 2000, 2003; IIED 1992; Reed, 2013; Sachs, 1999; Sneddon *et al.*, 2006; Swilling & Annecke, 2012; United Nations, 2009):

- **Social:** a system that manages to achieve distributional equity, provides sufficient levels of service provision public services, political freedom, participation and gender equality.
- **Economic:** a system that can produce goods and services, with a government that ensures controllable levels of external debt, and avoiding sectoral imbalance.
- **Environmental:** a system that ensures a resource base that is sustainable, by minimising over-exploitation of renewable and non-renewable resources, and maintaining ecosystem functions (particularly those not considered economic resources). Going beyond this, Shepherd and Patzelt (2011: 49) note another aspect here of “sustaining the natural environment for its intrinsic value”.

The need for more sustainable forms of development is acknowledged by national government, through several of their documents. One of these is the National Development Plan (NDP) that does well to identify the challenges the country faces, and draws out objectives and actions to address these. The NDP has an entire chapter that describes the goals of “ensuring environmental sustainability and an equitable transition to a low-carbon economy”, and another chapter that focuses on “an integrated and inclusive rural economy” (National Planning Commission, 2011). Another document is the New Growth Path Framework, that stresses the importance of creating a “more inclusive economy”, and “creating decent work, reducing inequality and defeating poverty” (Department of Economic Development, 2011). The IPP Office (2017) uses similar terms to describe the objectives of economic development activities, namely: “environmentally sustainable growth” and “equitable sustainable rural communities”. These and others, such as the Integrated Sustainable Rural Development Strategy and even the Constitution, communicate the intention and desire to work toward creating a just and ecologically conscious society, but unless there is political backing and institutional weight to support these plans, they will remain solely on paper (Olivier & Williams, 2010; Rennkamp, 2013). The idea of sustainable development is still criticised, primarily around the vagueness of the concept. For example, questions have been raised around what exactly should be sustained, and whether there can in fact be ‘sustainable’ use of a finite resource as these will inevitably be exhausted (Shepherd & Patzelt, 2011). Another argument is that the notion of sustainable development has “opportunistically been stretched from "conservation management" to "economic development", and that the Brundtland

Report promoted nothing but a business as usual strategy for world development, with an ambiguous and insubstantial concept attached as a public relations slogan” (Perez-Carmona, 2013: 94–99).

In response to some of these questions, Shepherd and Patzelt (2011: 138) attempt to answer: “what is to be sustained, namely, nature, life support systems, and community, and what is to be developed, namely, individuals, the economy, and society”. The authors go further, and explain that tensions and contradictions emerge when thinking about sustainability and sustainable development in a pragmatic way: “A more nuanced view may explore competing institutions on sustaining the natural environment and sustaining communities. For example, the culture and identity of Inuits involves hunting and killing whales. We normally think of the trade-off between sustainability and development but in this case the trade-off might exist between the different dimensions of sustainability”. This reflects the fact that sustainability can be interpreted in many ways, depending on the individual or community, their context and their priorities.

These criticisms of sustainable development have merit, and reflect how broad the topic is, and the many ways in which the concept can be interpreted. Essentially, the notion of sustainable development aims to act as a guideline, and advocates for viewing ‘development’ in a more broad sense, taking social and ecological factors into account in a more intentional manner.

The renewable and mining industries have the opportunity to enact parts of this thinking/ aim but, at present, each corporate appears to be operating on their own, and trying to achieve what they individually feel appropriate. While this allows for autonomy and context specific solutions, it also means that many ad hoc projects exist which are not aligned with the principles of sustainable development. The funding that exists represents an opportunity to learn from developed countries, and work toward sustainable rural communities: “sustainable rural development is vital to the economic, social and environmental viability of nations. It is essential for poverty eradication since global poverty is overwhelmingly rural... and there is great value to be gained, by coordinating rural development initiatives that contribute to sustainable livelihoods through efforts at the global, regional, national and local levels” (United Nations, 2009). To truly embody and embed the ideas of sustainability and sustainable development at a grass-roots level in community development projects, it will be argued in this research that there are three principles that should guide development practitioners in their initiatives.

2.6 CSR in the REIPPPP

Due to limited foresight, the country began facing electricity supply shortfalls in 2007, resulting in steep price hikes and intermittent supply (due to parts of the national grid having to be shut down to limit demand) (Deloitte, 2012; Department of

Energy (DOE), 2013). Shortfalls have been the result of bad planning by Eskom, South Africa's public electricity utility, as well as serious financial inefficiencies, a problem often associated with public monopolies and South African parastatals (Mbeki, 2009; Moeti, 2013).

The Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) was created by a division of the Department of Energy (DOE) called the IPP Office or Unit, in response to these issues. This programme invited corporations (Independent Power Producers or IPPs) to build renewable power plants in South Africa, and sell the electricity to Eskom, who then feeds it into the national grid. This takes place incrementally, over a series of bidding windows, each of which had individual price and production capacity caps for the different generation types (solar, wind, biogas etc.). This approach was used to build market confidence in the programme and country, for IPPs and the IPP Unit to learn and make adjustments, to limit oversubscription and to encourage competition between renewable energy developers in order to keep prices low (Pieters, Lotz & Brent, 2014).

The primary aims of the REIPPPP are being met. In summary, these are (DOE 2013; Montmasson-Clair & Ryan, 2014; Mulaudzi, Muchie & Makhado, 2012; Pieters *et al.*, 2014; Walwyn & Brent, 2015):

- Rapid alleviation of the electricity supply shortage
- Attract financial and technical skills and capacities
- Lower and stabilise the cost of energy which spiked in response to the supply shortages in 2007
- Diversify SA's energy mix from coal to reduce carbon emissions and lower dependence on non-renewable resources as well as reduce the dependence on a single power utility (Eskom) and few large power stations
- Create a local renewable energy industry, contribute to job creation and support local economic development

The programme has been successful in terms of raising R201.8 billion committed to the building of renewable plants (IPP Office 2018a: 2). By 2017, a total of 6 422 MW of energy had been secured from 112 independent power producers (IPPs) over seven bidding windows (IPP Office 2018a: 2). The inclusion of renewables into the energy mix means that installed capacity has accelerated from 0% to around 5% since August 2011 (Macfarlanes, 2016). Attracting this level of investment is significant in the context of the economic and political uncertainty that includes the infamous prospective nuclear deal (Cordeur, 2015), and the newness of the market. As a result of this programme, the price of renewables fell dramatically since the first bid window in 2011, to the point where renewable energy costs are now competitive with coal power generation costs (Walwyn & Brent, 2015).

Much of the success in achieving these goals is attributed to the fact that the Independent Power Producer (IPP) Office was allowed some autonomy to operate outside the formal structures of the Department of Energy. This enabled more efficient operations without being hindered by laborious government processes (Eberhard, Kolker & Leigland, 2014; Montmasson-Clair & Ryan, 2014). The IPP Office was made up of competent individuals and supported by international expertise which enabled them to follow, and go beyond, international best practice guidelines of: effective institutional coordination; providing clarity, certainty and flexibility in the programme; focusing on pricing instrument; clear communication between stakeholders; incorporating development goals for the impoverished; as well as transparent and predictable regulation (Bouille, Boyd & Cunliffe, 2015; Eberhard *et al.*, 2014; Montmasson-Clair & Ryan, 2014). This highly capable team is still working on ironing out inefficiencies and problems in the programme, particularly for future bid rounds.

The programme is globally considered progressive, particularly because of the incorporation of the economic development component. In an attempt to pass more benefits to the country, project bids were required to include an economic development plan, laying out proposed plans of project companies to provide benefit to low-communities, primarily small and rural, within a 50-km radius of the project site, commonly referred to as project or beneficiary communities. Project bids were then selected according to the proposed cost of electricity generated, given a weighting of 70% of the overall decisions, as well as economic development criteria, weighted at 30% (DOE 2015).

Economic development is made up of seven elements which include; job creation, local content, ownership, management control, preferential procurement, socio-economic development (SED) and enterprise development (DOE 2015). The majority of these elements are relevant primarily during the bidding and construction phase of the project. Over the 20-year project lifespan, beneficiary communities are supported from renewable energy projects in three ways, the first of which is dividend income from ownership. A minimum of 2.5% of projects need to be owned by the local community, which is most commonly funded by development finance institutions who provide loans to communities. These loans need to be paid off from revenues generated from the renewable plant before dividends reach local communities. Communities also benefit from income, in the form of a percentage of total turnover, that project companies are required to spend on communities through an economic development approach. Companies also agree, at bidding stage, to contribute funds to surrounding low-income communities for two purposes: socio-economic development (a minimum of 1% of revenue was required) and enterprise development (minimum of 0% of revenue) (IPP Office, 2018a: 12).

Despite the well-intended economic development criteria, concern has been expressed around the effectiveness of the model in expecting profit-seeking companies to

engage in meaningful community development (Anonymous, 2016a,c; McDaid, 2014; Tait, Wlokas & Garside, 2013; Wlokas, Boyd & Andolfi, 2012). So far, implementation in this aspect of the REIPPPP has been disappointing. Some economic development initiatives are already underway, but the trend appears to be a compliance-focused, box ticking exercise instead of a process of collaboration and engagement with communities to provide relevant and significant solutions. This is a waste of resources and often a source of conflict and discontentment. An opportunity exists to correct this trend before the bulk of income streams begin accruing to local communities.

2.7 Developmental Challenges in the REIPPPP

The first step required to improve economic development efforts is to, with some level of depth, understand the areas of weakness within the development practices occurring within the REIPPPP.

2.7.1 Economic Development Proposal

The DOE IPP Office approved bids based on two sets of criteria: the price of energy, accounting for 70% of the decision, and economic development elements accounting for 30% of the decision. Due to the competitive nature of bids, IPPs' economic development proposals which outline the details around their procurement, socio-economic development, enterprise development and ownership intentions, were considered unique selling propositions and therefore kept confidential (World Wildlife Fund for Nature (WWF), 2015). From the outset, this discouraged planning initiatives in collaboration with nearby IPPs, government, the community or other social upliftment organisations in the area.

Drawing up proposals requires 'needs assessments' which are often commissioned before bid proposals are approved. These engagements, for many IPPs, represented an opportunity to gain community approval, in which IPPs had an incentive to make promises they could not keep, with the knowledge that projects would be under new ownership by the time revenue starts flowing and obligations need to be fulfilled. Besides the wasted resources used in hiring a consultant to conduct such studies, these assessments in combination with commitments made by IPPs resulted in unrealistic expectations by community members (Baker & Wlokas, 2015; McDaid, 2014).

When reviewing the bid winners and their proposals, the vast spread of proposed initiatives in economic development plans indicated that this element did not really affect bid selection (WWF 2015). This, in addition to the lack of feedback on development plans suggested that more innovative proposals were treated equally to other plans, which encouraged a compliance mentality, and disincentivised developers from submitting more ambitious plans in future bids (Tait *et al.*, 2013; WWF 2014).

Lack of feedback and guidance resulted in inconsistency between IPPs' development plans as well as uncertainty to which several developers responded with frustration (Boulle *et al.*, 2015; Tait *et al.*, 2013). Tait *et al.* (2013: 16) were critical of this process: "this calls into question the value of doing SED strategy development at bid preparation stage, considering its potential to complicate relationships further on, if these are not being evaluated in any meaningful way in the selection process".

2.7.2 Changes in Ownership

In a volatile economic climate, the relative simplicity, stability and long term nature of renewable energy became appealing to investors, resulting in the emergence of a secondary market around SA's privately owned renewable plants (van Heerden, 2016; Pineiro, 2017). After a three year lock-in period project shareholders are allowed to sell their equity stake in projects, subject to approval by the DOE, whereas debt can be sold almost immediately after the plant becomes operational (Baker & Wlokas, 2015; Montmasson-Clair & Ryan, 2014). Baker (2015) expressed concern around project companies having a short term profit focus with intentions of selling ownership as early as possible. The implications differ when debt is sold compared to equity: selling debt to a third party means that the relationship between lender and borrower changes, and becomes more complex especially for the banks, who would need to play a role as a trader in addition to simply that of a lender (Baker, 2015).

When equity is sold, there is a distancing of ownership (and therefore associated responsibilities) from capital (Baker, 2015). Pension and insurance funds are likely to be purchasers of equity in renewable projects, and these equity stakes are likely to change every few years, without the due diligence process (where all stakeholders were screened) as was done at the initial stages of projects (Baker, 2015; van Heerden, 2016; Pineiro, 2017). Developers have already begun selling projects, or portions thereof, thereby further reducing risk and creating blurred lines around accountability. This could have implications for communities, especially when considering the economic development promises that need to be delivered over a 20-year period (Baker 2015; Eberhard et al. 2014).

2.7.3 Community Trusts

The IPP Unit stipulates a minimum community ownership stake in the renewable projects of 2.5% (DOE 2011). The most common structure chosen by IPPs was a trust, which has had limited success thus far. Trusts were created prior to the construction period, sometimes with trustees being elected, and remaining dormant until finances were generated from the plant. The practice of setting up of new community trusts ignores existing structures within communities which could have served the same purpose. This also resulted in cases where several trusts in the same community were set up by different IPPs.

The community share of the plant was most commonly funded by a loan from a development finance institution (DFI) that needed to be repaid before dividends could

accumulate in the trust, a process which can take between seven and seventeen years (WWF 2015). In an effort to address this, the Industrial Development Corporation (IDC) incorporated a ‘trickle dividend’ into trusts they provided funds to, allowing a portion of revenue to flow into the trust, while the bulk of revenue flows is used to repay the loan (Baker & Wlokas, 2015; WWF 2015; Eberhard *et al.*, 2014).

2.7.4 50-km radius

The distributed nature of renewable energy plants meant that they are often situated in remote areas with rich solar or wind resources. There are commonly several small communities that reside in these areas, with some being impoverished with little surrounding economic opportunity. Cognisant of this, the REIPPPP required project developers to decide on the beneficiaries of economic development funds within the 50-km radius. This could be a specific village, informal settlement, or all individuals within the area as long as beneficiaries are considered ‘previously disadvantaged’ as per the Black Economic Empowerment legislation (WWF 2014).

The 50-km radius in some cases came into conflict with existing boundaries, such as municipal, tribal or borders of towns or villages, which ran the risk of exclusionary effects or dividing communities (Eberhard *et al.*, 2014; Tait *et al.*, 2013; Wlokas *et al.*, 2012). This radius was also considered arbitrary in terms of the equitable distribution of funds. Due to beneficiaries being chosen within the defined geographic areas, impoverished communities that exist outside of this area do not benefit at all. For example, the Northern Cape is the most sparsely populated province (2% of the country’s population, just 3 people per km²) yet has procured the greatest number of projects (IPP Office 2015). Tait *et al.* (2013) caution that this may have implications such as migration, or conflict.

Clustering also occurred at a more localised level in which IPPs’ beneficiary communities overlap (WWF 2015). Tait *et al.* (2013: 20) give some perspective on the scale of the problem: “over a 20 year period, larger projects may result in tens of millions of rand being directed at specific communities”. Because each developer was required to submit their own confidential economic development proposal, these were done in isolation of one another which was confusing for communities, and in the absence of collaboration, likely to lead to wasted efforts by IPPs.

2.7.5 Exclusion of Local Government

Local government seems to be excluded from the REIPPPP and their role in the programme was unclear beyond initial basic support to IPPs, such as support with supplying permits such as land rezoning, refuse removal from project site and water and electricity provision (DOE 2015; McDaid, 2014; Tait *et al.*, 2013). Municipalities are generally considered to be under resourced, unskilled, under capacitated and easily susceptible to corruption and are “only engaged in a fragmented, peripheral and uncoordinated manner” (McDaid, 2014: 23; Tait *et al.*, 2013; WWF 2015). Learning from a municipal official’s insight, Tait *et al.* (2013: 18) recognise that “a

more collaborative approach to building on a municipality's existing development projects could create synergies and better outcomes than many individual processes”.

2.7.6 Secrecy

IPPs are unwilling to share the initiatives they are engaged in, and the amounts spent on these in the public domain. This appears to be the legacy of the economic development element of initial bid proposals being submitted under the competitive bidding process. Another possible reason for this could be that IPPs are afraid to come under scrutiny. This mentality- that there is some sort of competitive advantage after bids are won- hinders learning from one another, and potential collaboration (McDaid, 2014; WWF 2015).

2.7.7 Quarterly Report

Project developers were required to submit a quarterly report to the IPP Office outlining the finances spent on their economic development initiatives. Failure to spend money allocated to the community could result in penalties for the IPP, or losing their license to operate in extreme cases (DOE 2015). The quarterly reports written by the IPP and submitted confidentially perpetuates the mentality of secrecy and competitive advantage with regard to economic development initiatives (McDaid, 2014; WWF 2015). This not only limits collaboration among IPPs (and other stakeholders) but also limits the potential for learning from one another. With IPPs writing their own economic development quarterly reports, claims made by developers regarding community benefit cannot be scrutinised or validated.

Another element of concern with this approach is that the requirement for a quarterly report “does not match developmental principles of incremental and steady growth over time matched with building of local capacity” (Tait *et al.*, 2013: 18). In other words, the short-term reporting timeframes in which IPPs were expected to report were not in alignment with the long-term thinking required for effective community development.

2.7.8 ‘Meaningful’ Development

Another critique of the IPP Office's economic development requirements was that their definition of development was vague, allowing for ‘creativity’ and manipulation by IPPs to meet requirements (Baker & Wlokas, 2015; Montmasson-Clair, Ryan & Moilwa, 2014). The lack of clear definitions also limits the ability to measure, and therefore track, improvements with some degree of certainty and transparency. Few IPPs have been proactive in adopting monitoring mechanisms which take quantitative and qualitative data into account (WWF 2015). The current use of financial spend as the indicator is an undisputable one, but is also superficial. The result is often a compliance-focused, box-ticking approach to community upliftment efforts, as opposed to focusing on realising meaningful improvements in livelihood within impoverished communities.

2.7.9 Lack of Development Skills

The skills required to appropriately engage in meaningful community development efforts differ fundamentally from the core skills held by IPPs, whose proficiency lies in the building and maintenance of renewable plants, and the IPP Office which specialises in deal structuring (Wlokas *et al.*, 2012). In the majority of cases, an economic development manager or community liaison officer was appointed from the community or area, with little or no development expertise, to manage the economic development aspect of the renewable energy company's projects. The limited skills and experience in project companies resulted in poor execution and inappropriate development planning and community engagement (Boulle *et al.*, 2015; Tait *et al.*, 2013).

Development expertise was also lacking in the IPP Office, made evident by “the lack of clarity and expertise in formulating the ED content of the programme (which) led to inconsistency from project companies in accommodating these requirements” (Boulle *et al.*, 2015: 22). In contrast, the technical energy procurement element of the programme was far better thought out, “robust and technically sound” with request for proposals that “gave credibility to the programme and confidence to private developers”.

2.7.10 Community Engagement

McDaid (2014) found a consistent failure among project companies to work with communities openly and to facilitate the participation of communities in economic development planning designed to impact their lives. This lack of engagement and poor coordination with existing institutions within the community resulted in confusion, frustration and was a likely cause of chaotic development (McDaid, 2014). It was frequently found that communities had little knowledge about the plant near them and about the larger procurement programme (WWF 2015). This level of communication resulted in unrealistic expectations around, for example, employment and of electrification for local communities (Tait *et al.*, 2013; WWF 2015). Community members who were aware of the community benefits from the plant often lacked knowledge about where the funds came from and why the money was allocated to them, and were thus uneasy about sharing information about the money they had received (WWF 2015).

These disengaged community upliftment efforts used by multinational corporates have been seen before. The mining industry in South Africa has a long history of being involved in CSR initiatives in the rural communities due, to the rural location of many mines. Mining companies are required by law to have a social and labour plan (SLP) which should include details on human resource development, community development, housing and living conditions improvements, employment equity and strategies to stabilise mine employment levels during downscaling or closure (Department of Mineral Resources, 2010), in order to qualify for mining and production rights.

There are several themes that are common in the community development practices in the renewable energy and mining sectors. In both, most of the community development initiatives are managed by corporates that will have a long-term presence in rural parts of South Africa. These similarities allow for the transfer of knowledge and lessons from the well-established mining industry to the nascent renewable energy industry.

2.8 CSR in Mining

More aware companies, including corporations in the mining industry, have for a long time known that it is in their interests to work on issues that cause difficulty to the local communities that they operate in (Kapelus, 2002). The reason behind this is that local communities, especially when able to organise themselves, can put themselves in a position to impose costs on companies. Historically, this has meant that companies have focused more on communities that have more capability, which has meant more of a focus on the issues raised by communities in developed nations than in developing nations (Kapelus, 2002).

In recent years, corporations are increasingly moving their operations to developing nations, but are not the only organisations with a greater global presence. Environmental activist and other oversight groups are also growing and engaging with groups in developing countries, with the result that corporations are increasingly monitored, and held accountable for their actions. Multinational mining corporations are changing as a result of the negative publicity, production delays and other actions by civil society groups (Kapelus, 2002). A key question is whether the approach adopted by corporates is “likely to effectively address the development concerns that the local communities in developing countries have” (Kapelus, 2002: 275).

2.8.1 Ambiguity of terms

The Mineral Resources and Petroleum Development Act provides socio-economic development guidelines and scorecards, but not more than this (Mabuza, Msezane & Kwata, 2010). Similarly, there seems to be a weak understanding of the terms ‘sustainable development’ and ‘sustainability’, the direction toward which these firms should be heading. This critique must be understood in the context that these terms are new to corporations in South Africa, with the second King report on corporate governance (South Africa’s best practice guidelines around corporate governance) released in 2002 including, for the first time, sections on sustainability and ‘triple bottom line’. This marked the early stages of corporates in SA having to grapple with the notion of economic, social *and* environmental sustainability. Though these terms are widely cited (Department of Mineral Resources, 2010; Patel & Mushonga, 2014; Siyobi, 2015), few of the interventions are in fact financially self-reliant, socially inclusive and ecologically restorative, which points to attempts at green-washing and limited strategic direction. This may suggest a lack of interest and/or limited skills in

implementing socially and ecologically sustainable community development initiatives.

2.8.2 Compliance as CSR driver

Mining houses had controlling power over how they saw fit to comply with the legislation, which they did in accordance with the firm's own level of compliance, and interpretation (Siyobi, 2015). The most common mentality prevalent within the mining sector legitimised corporate social responsibility (CSR) as “charitable donations and support to good causes” (Hamann, 2004: 278) and as an ‘add-on,’ or no more than philanthropic acts” (Mabuza *et al.*, 2010: 4). At least initially, the attitude was that CSR was merely a “fulfilment of their social responsibility obligation” (Kloppers & Plessis, 2008: 114) and “philanthropic initiatives premised on competitive efforts at gaining improved image and reputation” (Hamann, 2004: 288). A consequence of mining houses attempting to further their business image, was limited engagement and collaboration between local stakeholders, perpetuating the ‘top-down’ approach (Hamann, 2004; Hilson, 2009). As a result of this, a disengaged, compliance approach was taken toward community development instead of trying to understand the social problems and associated complexities (Hamann, 2004).

In theory, nearby mines should represent a supply of jobs and an opportunity to create wealth, but the reality is that local, poor and most prominently black communities are not significant beneficiaries of mines (Kloppers & Plessis, 2008). The lack of skills in communities contributes to this, as the role of locals is often reduced to that of unskilled labour, which is poorly paid (Mabuza *et al.*, 2010). Mining houses therefore used their CSR, or corporate social investment (CSI), budget for short term projects which are unrelated to their core business practices, such as the setting up sewing and poultry businesses (Mabuza *et al.*, 2010). These add-on type projects are completely irrelevant to the mines thus often failed, as mines did not have a vested interest in seeing them succeed, had little competency in these sectors, and were only required to show that the funds had been spent for this purpose. The Centre for Applied Legal Studies (2016) echoes the sentiment that mines holding control over community development without having any incentives is problematic, and that the problems begin at the social and labour plan stage, which is not representative of real community needs.

2.8.3 Collaboration

Weak cooperative governance, which does not respect dynamics between communities, traditional leaders and local government, results in ineffective or failed projects as a result of little support or buy-in, unclear roles, and duplication of efforts which can result in further political disorder and discontentment among community members (Mabuza *et al.*, 2010; Nel, Binns & Gibb, 2014). Historically, cross-sectoral collaboration and commitment is not prevalent, and CSR initiatives are not aligned with local municipal integrated development plans (IDPs) (Hamann, 2004; Mabuza *et al.*, 2010). Hamann believes that this is changing, and cites a mining representative as saying “now we have matured” (Hamann, 2004: 288). Mining companies appear to be

more willing to join forces with government and accept shared responsibility of social issues in surrounding communities, realising that weak collaboration poses a business risk as it impacts on their reputation and workforce productivity (Hamann, 2004).

Similarly, in developing countries where governments struggle to provide basic services, communities may begin to request these services from mining companies who effectively become substituted for the local government authority (Kaufmann, D., Kraay, A. & Mastruzzi, 2009). This dependence on CSR risks undermining and distorting the governments' ability to provide basic services as communities may stop depending on, and demanding transparency from local governments, thereby reducing the incentive for efficiency and the provision of services (Kaufmann, D., Kraay, A. & Mastruzzi, 2009). Corporations deciding to step into the role of service provider, especially when doing so without consulting local authorities, can put major strain on the relationship with government, and possible future collaboration.

2.8.4 Power Imbalances

In addition to the limiting legislation, this approach of mines means that surrounding communities often feel ignored and have little power or formal structures through which they could voice their apprehensions (Kloppers & Plessis, 2008). Often, only certain sections or individuals within a community are consulted, and ineffective communication with the community often means that locals are not even aware of mining CSR projects taking place (Kloppers & Plessis, 2008). Mabuza *et al.* (2010) consider this a serious issue which limits engagement between locals and municipalities, among whom there are dire resource and capacity needs. Engagement, in which equitable dialogue and commitment is lacking, often results in the implementation of irrelevant CSR initiatives which fail to address fundamental problems in communities (Mabuza *et al.*, 2010).

2.8.5 Accountability

The labour plans require substantial strategies and annual reports from mining companies. The plans have several limitations due to regulation not legislating mines to engage with communities throughout the lifecycle of plans, nor does it allow for mechanisms that communities can use to hold mines accountable to commitments made (Centre for Applied Legal Studies (CALs), 2016). In addition, legislation does not allow for regulators to evaluate the appropriateness of the plans, or interrogate the extent to which mining corporations are committed to their CSR ambitions (CALs 2016; Mabuza *et al.*, 2010). There is therefore risk of mines overstating their CSR activities in their reports for publicity and reputation building (Mabuza *et al.*, 2010).

2.9 Differences between Mining and Renewable Energy Sectors

In addition to the commonalities between the two sectors, acknowledging the differences between the mining and renewable industries is important, as this affects the way in which these corporates can and should operate.

Unlike the renewable industry, the mining sector is associated with large scale social ills directly caused by mines. Such as health issues affecting communities as a result of mining operations, health issues affecting miners, and explosions set off during the digging process causing damage to households. Some of the ecological issues include large scale vegetation clearing, carbon dioxide emissions, resource extraction, and pollution of water sources. A strong argument can therefore be made that mining houses have a responsibility to, at least, put measures in place to alleviate the harms they cause. Renewable energy plants do not directly cause comparable social or ecological ills through their operations.

Because labour and up- and down-stream services are required throughout the lifetime of the mine, the potential exists for mining houses to connect their CSR commitments to mining operations. In contrast, in the renewable sector almost all activity occurs during an initial construction period (on average 18-months) during which there would be a demand for unskilled labour, equipment, transportation, accommodation, food etc. when revenue (and CSR funds) is not being generated (Eberhard *et al.*, 2014). After that, the plant is able to operate passively without the need for many inputs, or other associated activities. This limits the possibility to link CSR funds from a renewable energy plant to core operations which take place around the plant - beyond security, bush clearing, panel cleaning and maintenance - which cumulatively have an insignificant labour requirement.

From the individual issues outlined above, criticism can be levelled at the IPP Office for a poorly thought-out programme design (related to economic development component) including putting limited monitoring and evaluation tools in place, and for binding profit-seeking businesses to community upliftment projects. Blame can also be assigned to IPPs who, despite being aware of the intentions of the programme and agreeing to the terms, decided to abuse the flexibility the programme, instead of using the opportunity to collaborate with local actors (such as government and surrounding businesses), and work closely in a participative process with communities to support their own development.

2.10 Effective Community Development

Many of the limitations highlighted above stem from ineffective community development practices adopted by corporates, that could be due to a lack of practical community development skills and understanding, or a lack of incentive. The many terms that can be used to describe the approach taken by corporates include: top-down, risk minimising, hand-out, philanthropy, good-will, feel-good, aid, compliance, box ticking, and welfare, which suggest an approach that is disconnected, and largely ineffective (if not damaging) in the long run (Moyo, 2009; Munro, Van Der Horst, Willans, Kemeny, Christiansen & Schiavone, 2016; Van Schalkwyk, 2015; The 4th Barefoot Guide Writer's Collective, 2015).

National government is also guilty of employing this mentality – their use of, and dependence on, social welfare grants as a relief mechanism is evidence of this and is a symptom of the elite being unwilling to engage with deep, structural problems (Heideman, 2011; Khan, 2013; Mbeki, 2009). Pieterse (2001: 126) considers welfare in this form more a case of “social fixing and political risk management” than social development, which tries to “tidy up the immiserating effects of the market”. Conventional development support often overemphasises money transfer, and assumes that this will directly correlate with improvements in wellbeing (Munro *et al.*, 2016; Nwankwo, Phillips & Tracey, 2007; Sirolli, 1999).

While aid is appropriate in disaster relief and similar short-term situations, Pieterse (2001) and Moyo (2009) share the sentiment that aid and welfare approaches can, when chronic, actually exacerbate the very problems they are trying to alleviate by engraining a culture of dependency. This is true on a local and national level, in which money transfer often allows for corruption, and causes negative consequences for development (Mbeki, 2009; Moyo, 2009; World Economic Forum, 2015). Moyo (2009: 44) explains why this micro-macro paradox is problematic: “A short term efficacious intervention may have few, discernible, sustainable long term benefits. Worse still, it can unintentionally undermine whatever fragile chance for sustainable development may already be in play. Certainly, when viewed in close-up, aid appears to have worked. But viewed in its entirety it is obvious that the overall situation has not improved, and is indeed worse in the long run. In nearly all cases, short term aid evaluations give the erroneous impression of aid’s success”.

The Barefoot Guide Collective (2015: 85), written by several experienced development practitioners, further elaborates on this approach whereby development aid programmes “dump capacity-building, technology, and funding onto communities ... and in doing so they further bury the hidden reservoirs of community potential”. By doing this, they explain, development programmes move further away from that which people already know and the answers from the local context. Bringing solutions from outside of communities has destructive effects on peoples’ will, confidence and ownership of the project resulting in projects that do not survive without the outside party (IIED 1992; Mitlin, 2004; The 4th Barefoot Guide Writer’s Collective, 2015). The Collective outlines what is probably at the heart of all community development practice – that only people can change themselves and their situation (Boaduo, 2014; Plattner & Gonzo, 2010; Singh, 2009; The 4th Barefoot Guide Writer’s Collective, 2015).

Current community development practice simplifies social problems to the point where bricks and mortar become the solution – vastly different to the intricate, complex and compassionate work required for meaningful change. To have meaningful long-term social impact in resource deficient rural communities, CSR initiatives need to follow deeply engaged ways of working with local actors, that

allow for an understanding of the local context, the building of trust with locals, and allows ideas and passion to emerge from within communities (Mansuri & Rao, 2013; Sirolli, 1999; Wellard, Rafanomezana, Nyirenda, Okotel & Subbey, 2013). This shifts the role from a conventional top-down, hand-out approach, to one where patience, respect and compassion are required to enable individuals to find their solutions to their own challenges (Wellard *et al.*, 2013).

Having established the challenges that have emerged in community development efforts in the REIPPPP and mining sectors, literature is further reviewed in order to understand how development initiatives can be improved. To begin with, Midgley's (1995: 25) defines social development in the following way: "a process of planned social change designed to promote the well-being of the population as a whole in conjunction with a dynamic process of economic development". This definition shows that economic development is intertwined with human and social development. From a social work perspective, this suggests that economic development cannot be separated from human and social development. Part of the developmental challenge, therefore, is to also invest in and build human and social capital, if individuals are to become able to gain the relevant education and skills to capitalise on opportunities presented to them or that they discover (Lombard, 2003; Midgley, 1995).

Following from this, it becomes clear that social work should make an economic contribution. Shepherd and Holger (2011: 151–152) citing others, explain exactly why emphasis should be placed on supporting low-income communities from a financial standpoint: "considerable research demonstrates a positive impact of socioeconomic status on emotional (Gallo & Matthews, 2003), psychological (Twenge & Campbell, 2002), and physical health (Hanson & Chen, 2007) of people. Further, parental socioeconomic status is associated with a host of indicators of childhood well-being and their socioeconomic status as adults (for a review see Conger & Donnellan, 2007)".

Having established the importance of development practices integrating economic, human, social and ecological capital, the remainder of this section will try to identify how best to accomplish this using prior studies and existing theory. The paper argues that incorporating sustainability into development efforts, as well as community development expertise and an enterprise mind set are some of the keys to effective community development projects.

The terms 'social workers' or 'community development practitioners' will be used interchangeably in this study, to describe individuals (or groups) that are "responsible for delivering social services to the vulnerable in society" (Lombard, 2003: 225). The Centre for Effective Services (2010: 19) elaborates on this definition and states that "community development is concerned with promoting human rights, democracy, equality and social justice. In essence, it is about tackling poverty and disadvantage". The profession is commonly affiliated with social grants and food security, but as

previously highlighted, should broaden their focus to incorporate economic elements as well.

Though external ‘experts’ can leverage their status to catalyse development initiatives and unite collectives, development agents should be cautious and ensure their involvement does not become overly paternalistic (Munoz, Steiner & Farmer, 2015). The core objective of development agents is to be facilitators, and not implementers. This forces the development practitioners to wait patiently and search for passions and capabilities that emerge from within the communities (Munoz *et al.*, 2015; Nwankwo *et al.*, 2007; Sirolli, 1999).

Weyers (2007: 8) advocates for practitioners having a “thorough knowledge of community work/developmental social work theory”. Understanding social process involves having patience and compassion when working with communities, treating individuals with respect and as equals, and being able to communicate clearly and transparently (The 4th Barefoot Guide Writer’s Collective, 2015). Reflecting the importance of compassion, in referring to the use of scientific processes and procedures, Weyers (2007: 9) says: “it would seem as though proficiency and efficiency at these tasks are not the main determinants of success, but rather the way in which they are performed”. Part of this process is understanding that communities know their own situations best, and interactive and inclusive processes should be put in place to learn more about, and begin to solve the problems – these processes can also act as informal learning opportunities (Bamber *et al.*, 2010; Weyers, 2007).

Weyers (2007: 11–12) refers to this as instilling an “internal locus of control in your project members/community group” and considers this the most challenging ability to build competency in as a development practitioner. The author explains that this is often achieved by assisting groups to “unlearn their learned helplessness mindset”, “convince them not only to take ownership of their current situation but also of the ways and means to bring changes to it”, “not to see themselves and/or their community as victims but rather as potential victors” and “convincing them that they are people of innate worth” (Weyers, 2007: 11–12).

It is also critical for communities to take ownership of their needs and the ways they can fulfil them, which are often most effectively fulfilled as a collective (Bamber *et al.*, 2010; Weyers, 2007). Another core idea is that the goals of practitioners should be to act as an enabling force, “increasing people’s power to influence the decisions that affect them, both individually and as a community” and “building on the inherent capacity and rights of communities to take action to achieve shared goals or defend against a common threat” (Bamber *et al.*, 2010: 19). By allowing communities to drive process, the power dynamics between corporates and communities change, which empowers communities to become more proactive, self-reliant and more resilient (The 4th Barefoot Guide Writer’s Collective, 2015: 25; Tracey, Phillips & Haugh, 2005; United Nations, 2009). Real empowerment is at the core of

development initiatives because it begins to address the psychological challenges faced by many low-resource communities, such as a sense of worthlessness, apathy and hopelessness resulting from lack of access to opportunity and decades of oppression (Cooper, 2014; Kagee & Price, 1995; Mbeki, 2009).

Westoby, in *The Barefoot Guide* (2015: 112), agrees and states that “all sustainable change begins as an inward journey” as individuals need to free themselves from the overwhelming feelings of hopelessness, and from identifying themselves as victims that are dependent on external saviours, without control over their own destiny. This is known as transformative change, through which individuals change their perception of themselves, their attitudes toward their capabilities, and practices in society (Plattner & Gonzo, 2010; Singh, 2009; The 4th Barefoot Guide Writer’s Collective, 2015: 112).

Another habit practitioners are required to have, is the habit of spending time on self-renewal and cultivating perseverance (Weyers, 2007). This again highlights that the career is mentally and physically exhausting and requires deep patience, as efforts often take a long time to materialise, due to the immense challenges practitioners often face. This fatigue frequently tested this practitioners’ belief in the capability of individuals to change “deeply embedded habitual tendencies” and sometimes led to “disillusionment and an inclination to leave community practice or even to quit the profession altogether” (Weyers, 2007: 14).

2.11 The Psychology of Poverty

A core argument made by this paper is that the hand-out, risk minimising approach seen in development practice is ineffective, because it does not adequately respond to the challenges, many of which are psychological, of poverty, a deeply complex and multidimensional state of being. As described earlier in this study, poverty is conceptualised as scarcity resulting in basic needs not being met, where basic needs are understood to extend beyond material needs, and include psychological, emotional and other human needs (such as dignity, respect, a sense of belonging). In this section, the consequences of living in poverty will be explained in an attempt to dispel common misconceptions associated with those who have little economic and social resources.

In trying to explain reasons behind poverty Shildrick and Rucell (2015: 3) found that “... in many accounts, particularly popular and political accounts but also some academic ones, there has been an emphasis on the supposedly ‘undeserving poor’, where individual behaviours, supposed fecklessness or moral failings are cited as key causes of poverty” (Shildrick & Rucell, 2015: 3). These perceptions may be as a result of a lack of understanding of the complexity of poverty, which is now becoming better understood. Haushofer and Fehr (2014) concur, saying that public perceptions about poverty are contradictory to the evidence. While the perception is that the poor

have simple lives and have failed personally, this perception lacks the empathy required to comprehend the psychological challenges faced by the poor, and the enormous power the circumstances of poverty have over poor individuals (Haushofer; Fehr, 2014).

These negative perceptions and stereotypes of those suffering from economic hardship affect how they see themselves, resulting in them having dramatically lower levels of confidence, self-efficacy (i.e. their belief in their ability to be successful) and personal responsibility (Fell & Hewstone, 2015). This lack of confidence could mean that even if poor individuals were to get an opportunity that could support them out of poverty, such as educational or career prospects, they may struggle to adapt in these social settings (Shildrick & Rucell, 2015).

Fell and Hewstone (2015) also indicate that those brought up in poverty, due to their stressful context, may experience genetic adaption that may result in increased long-term illnesses such as cardiac disease and some cancers, emphasising the importance of early intervention (Fell & Hewstone, 2015). The other impact of a childhood spent in low socio-economic settings, includes reduced neurological activity and cognitive function across multiple areas including language, attention, memory, decision making and planning (Fell & Hewstone, 2015; Haushofer; Fehr, 2014). The result is the poor individuals have lesser educational potential, with likely further impact on employment prospects, and other aspects such as self-esteem.

There is also greater risk of mental illness, for example schizophrenia, depression, anxiety and substance addiction, among those in poverty. Drug and alcohol use is high among low income population groups, but addiction rates are not, and there are variations in substance use that are dependent on the duration of poverty (Fell & Hewstone, 2015; Khan, Murray & Barnes, 2002). One study, for instance, demonstrates that consumption of alcohol decreases after short-term unemployment, but increases in the presence of long-term unemployment (Khan *et al.*, 2002).

A key finding in the cognitive psychology field is the ‘scarcity hypothesis’ that suggests that the “scarcity of any resource leads to highly preferential focus on the immediate task at hand, to the exclusion of peripheral tasks or long-term goals. Experimental studies of this effect have shown that people experiencing scarcity can in some cases show greater aptitude at short-term resource management, but at the expense of their long-term performance” (Fell & Hewstone, 2015: 5). Poor individuals’ ability to make astute decisions include being able to effectively weigh trade-offs, observe prices closely, and juggle resources with care. The great stress and focus on extending scarce resources can occupy all their mental capacity, limiting the ability to gain career training, education, and other opportunities that could improve their lives in the long-term (Haushofer; Fehr, 2014; Mani, Mullainathan, Shafir & Zhao, 2013).

What is clear from this is that those with little income live with a ‘scarcity mindset’ that results in stress and adversely affects long-term decision making and the ability to invest in their futures. The result is that these vulnerable individuals remain poor and stressed, perpetuating the cycle of poverty. The complexity of the challenges that those in poverty face calls for not only an understanding of social change, but also, a deep level of compassion and patience from the development practitioner.

Through better understanding the psychology of poverty, it becomes clear why conventional development approaches, where attention is placed on external and physical improvements in communities, often fail. In historic development thinking “we act as though change can be created and engineered, as though we can change others (and have the right to change others, are even tasked to change others, because we ourselves are somehow more ‘developed’)” instead of focusing on “the levels of culture and capacity that underpin that change” and “key elements such as resourcefulness and consciousness” (Westoby & Kaplan, 2014: 217). The authors advise that development practitioners should not “‘bring’ development, but intervene into development processes that already exist. The key practices for a development practitioner then are to be able to ‘read’ or discern where a community or organisation is on its own development pathway. The shift is from ‘bringing resources’ to ‘facilitating resourcefulness’ (ibid, p. 17), from engineering to guiding (at best), from constructing to responding, from analysing to reading (and assisting others to read)” (Westoby & Kaplan, 2014: 217).

In line with Kaplan and Westoby’s concept of fostering resourcefulness, Si *et al.* (2014: 120) agree that development efforts need to focus on capacitating the poor and enabling them to find solutions to their own challenges:

“...the greatest opportunities for the poor in their struggles to alleviate poverty derive from local efforts, particular their own ability to find and develop business opportunities. Above all, we argue that the crucial factor in their emergence from extreme poverty has been a fundamental change in the attitude and behavior of the poor themselves. Although prior studies have emphasized microcredit, skill training, and other external approaches to poverty reduction (Bruton, 2010; Bruton, Khavul, & Chavez, 2011; Khavul, Bruton, & Wood, 2009; Shao, 2008; Webb, Tihanyi, Ireland, & Sirmon, 2009), the key issue of how best to enable the poor to take advantage of such aid has rarely been dealt with in scholarly literature.”

Development and poverty reduction practices therefore cannot only provide external band-aid type support, but rather, support should be holistic – material and psychological. Per the thinking of effective community development practice and transdisciplinary research methodology, development agents need to engage closely with impoverished communities to understand their context, and slowly

start to support the transition to new positive attitudes and behaviours, such as resourcefulness and self-belief.

2.12 Enterprise in Development

After many years of “large-scale governmental-planning failures” there seems to be growing acknowledgement that “small-scale individual innovation and entrepreneurship have emerged as pivotal factors in the struggle to reduce poverty” (Si *et al.*, 2014: 120). Without taking away from the importance of charity that is able to provide basic needs, Kielburger and Kielburger (2014), founders of an international development organisation, state that if the aim is long-term self-reliance we “must engage the entrepreneurial spirit that is so vibrant in the developing world” ... “entrepreneurship is a key player in ending global poverty by reversing the cycle of dependency with a cycle of self-sufficiency and employment. From pint-sized street vendors and rural artisans, to technological innovators and social entrepreneurs who creatively tackle barriers to progress, small businesses are the building blocks of resilient, independent economies” (Kielburger & Kielburger, 2014).

There has for some time been recognition by academics and practitioners from policy studies and community development that “local entrepreneurship is a major driver of regional development”. They are looking for practical ways to involve themselves in communities with the intention of facilitating and catalysing entrepreneurial activity (Sant’Anna & Nelson, 2017: 2). With more than a third of the global population living in impoverished conditions, researchers have the potential to support the improvement of lives by understanding how these individuals can use entrepreneurship to better their situations (Bruton, Ketchen & Ireland, 2013).

Incorporating enterprise in development projects can result in improvements in socio-economic levels of vulnerable communities, which has been found to have positive impacts on emotional, psychological and physical health (Shepherd & Patzelt, 2011). Another reason for incorporating enterprise thinking into development projects is that it may be assist some of those in poverty to overcome mental models such as the scarcity mindset, or a mindset of being dependent on others. This, given the extensive and deep mental challenges faced by those in poverty, is likely to be difficult.

Building on the definitions of others, one definition provided by Lombard (2003: 231) for entrepreneurship and entrepreneurship thinking is:

“Drucker (1985) states that entrepreneurship is a “practice”, which means that entrepreneurship is not a state of being, nor is it characterised by making plans that are not acted upon (Carton *et al.*, 1998:5). The latter authors argue that entrepreneurship begins with action, the creation of a new organisation (project). This project may or may not become self-sustaining and in fact may never earn

significant revenues. But when individuals create a new organisation by starting a project, they have entered the entrepreneurship paradigm.”

Another definition, which incorporates sustainable development, is shared by Shepherd and Patzelt (Shepherd & Patzelt, 2011: 142): “sustainable entrepreneurship is focused on the preservation of nature, life support, and community in the pursuit of perceived opportunities to bring into existence future products, processes, and services for gain, where gain is broadly construed to include economic and non-economic gains to individuals, the economy, and society”. This definition can be considered a broader definition of ‘ecopreneurship’ which focusses on the preservation of nature, and ‘social entrepreneurship’ that has its focus on creating social wealth (Shepherd & Patzelt, 2011).

According to Bruton et al. (2013), the entrepreneurship field has not sufficiently focused on poverty, which may be due to widely used definitions of entrepreneurship not considering the context of poverty. Furthermore, the “strategic actions and organizational processes that entrepreneurs use to compete and prosper in poverty domains are largely missing from the relevant entrepreneurship articles” and these actions and processes are likely to differ in developed and developing country contexts (Bruton *et al.*, 2013: 685). The authors acknowledge that entrepreneurs living in disadvantaged contexts are likely to face significant institutional gaps, as well as limited resources, and greater family responsibilities (Bruton *et al.*, 2013).

Lombard (2003: 228) believes that the definition that fits the African context “perfectly” is the notion of an ‘authentic entrepreneur’. This concept is described by Pippin (2001), who suggests that entrepreneurs who have five traits in common can be considered authentic entrepreneurs, they are successful because “they have discovered that real security is not financial; it is when they tap into their inner power to live purposefully and to create a meaningful lifestyle, not just a business” (Pippin, 2001).

The five characteristics of an authentic entrepreneur described by Pippin (2001) are as follows: they are visionary, take a wide view of their business, and can share their vision with others; they create their own destinies and are inspired by something bigger than themselves, and are able to overcome immensely challenging circumstances; they are driven and drawn to what they believe to be in their destiny; they are fulfilled and understand what is important to them; and finally, they know how to inspire and value the power of a team. Lombard (2013: 229) considers this thinking of an authentic entrepreneur “applicable in an African and South African context because it removes the traditional stigmas attached to entrepreneurs, allows more room for growth and negates the belief that entrepreneurs are born and not made”.

An enterprising mentality is one that is passionate, determined, proactive, creative, resolute and optimistic (Lyons, 2015; Moscardo, 2014; Sirolli, 1999; Trägårdh, 2008).

Understanding this and being allowed the opportunity to adopt such a mindset can re-establish the connection between increased effort and personal reward, which is especially significant for the many that were forced into unskilled, poorly paid jobs that do not offer the potential to progress according to individual performance. People are more likely to pursue entrepreneurial ventures when they consider it feasible and desirable to do so, and there are two stages to this process. The first is when people believe that an opportunity exists, and the second is when a person considers the opportunity one that they personally could pursue (Shepherd & Patzelt, 2011). Critically, the motivation and self-belief of an individual – characteristics of an enterprising mindset – affects both stages (Shepherd & Patzelt, 2011). This process of recognising and developing entrepreneurial opportunities is considered key to escaping poverty (Si *et al.*, 2014).

Si *et al.* (2014: 130) believe that the poor need to change their attitudes and motivations because “poverty reduction through entrepreneurship was largely influenced by internal forces such as an attitude-behaviour change from passive to active status”. This proactive and self-starter mindset should be cultivated, as it build confidence and self-efficacy, allowing feelings of hopelessness to be replaced with feelings of opportunity, and seemingly impossible challenges to be viewed as difficulties that can be overcome by self-reliant individuals (Fortunato & Alter, 2015; Nwankwo *et al.*, 2007). As a result of this shift in thinking, “power relations are transformed because partners are seen as sources of valuable assets, knowledge and expertise, rather than recipients of patronage or charity” (Tracey *et al.*, 2005: 327).

Another characteristic of an entrepreneur or entrepreneurial mindset is creativity, the creation of new ideas that can influence or are useful (Shepherd & Patzelt, 2011). Creativity should be nurtured as it can enable people to be more adaptable to changing situations, and can improve health, but creativity can also be stifled by a lack of respect and limited resources (Shepherd & Patzelt, 2011). This trait also plays a foundational role in entrepreneurship, which is about introducing novel items, processes or services (Shepherd & Patzelt, 2011; Si *et al.*, 2014).

The incorporation of enterprise thinking can manifest in different forms in the context of local community projects. One interpretation is to provide external supports such as microcredit as a poverty reduction mechanism (Si *et al.*, 2014; Yunus, Moingeon & Lehmann-ortega, 2010). Another interpretation, popularised by Prahalad (2004) is for large companies to view the base of the pyramid as a potential profitable market for goods and services while serving the requirements of the poor (Prahalad, 2004). Si *et al.* (2014) believe that an entrepreneurial mindset can assist locals to recognise and capitalise on opportunities, sometimes in ways that corporations cannot, due to their intimate knowledge of their context, and by so doing introduce new and useful products.

Midgley (1995: 103) refers to the individual or enterprise approach to social development, which is the idea that the wellbeing of society is improved when individuals work to better their own wellbeing. An entrepreneurial individual is described as “a person who takes up the challenge to start a micro-enterprise, either through his or her own initiative or after training” (Lombard, 2003: 230). This can be done to provide an income stream for themselves or their family, but “to really make an impact on poverty alleviation, communities need entrepreneurs who will not only generate income for themselves and their families, but also for the community” (Lombard, 2003: 230).

Elaborating on this, Bruton *et al.* (2013: 684) say that “entrepreneurship offers a means through which people can break the cycle of poverty”. Specifically, “within an integrated sustainable entrepreneurial strategy to alleviate poverty, the social welfare sector can embark on the entrepreneurial road by facilitating community economic development” (Lombard, 2003: 237). An example of this is explained by Peredo and Chrisman (2006: 310) who refer to a community-based enterprise as a community that “acts entrepreneurially to create and operate a new enterprise embedded in its social structure” that is “managed and governed to pursue the economic and social goals of a community in a manner that is meant to yield sustainable individual and group benefits over the short and long term” (Peredo & Chrisman, 2006).

Community-focused enterprise is also typically rooted in community culture, natural and social capital are integral and inseparable from economic considerations”, implying that there is opportunity for community members to uplift themselves while conserving surrounding natural resources in disadvantaged communities (Peredo & Chrisman, 2006: 309). Lombard (2003: 230) also advocates for “community development as a strategy to integrate human, social and economic development”. For community economic development to be successful, it needs to be integrated into existing community practices and traditions (Lombard, 2003). Furthermore, through the process of community economic development, a pathway and objectives that meets their real needs, independent of the desires of external parties and funders, must be co-created with the local community (Lombard, 2003; Peredo & Chrisman, 2006). Therefore the power of community economic development is that it ties into the very fabric of the community, to understand the challenges faced, and then finds ways to build capacity, and create economic and social change (Peredo & Chrisman, 2006).

In the community economic development process, social development can only be implemented by members of the local area themselves, while working together without conflict (Midgley, 1995; Sirolli, 1999). As a unified collective, especially with a joint vision or cause, communities can have a stronger voice and greater influence when engaging with power (Lombard, 2003). As the process unfolds, decisions will need to be made around which individuals should play different roles, and in an African context, this often means seeking the support of a community

leader, especially one who is able to facilitate the process (Lombard, 2003; Peredo & Chrisman, 2006).

Community economic development can draw inspiration from the Israeli kibbutz, a communal group of people that, at its foundation, focuses on the maintenance of each individual and uses financial success only to fulfil social goals and values of the group (Heilbrunn, 2005). This communal organisation has multiple sources of revenue in the form of business-focused production and service lines, and internal functions (for example laundry and building maintenance) that serve citizens (Heilbrunn, 2005). Through this, the kibbutz aims to ensure employment for members while insuring income for needs. Like other indigenous rural communities, the continuity of the kibbutz depends on its physical infrastructure, local resources, and on the trust, shared values, cooperation and innovation of its members (Heilbrunn, 2005: 113).

The notion of a sustainable economic community can be challenged. The kibbutz, for example, as a community construct is no longer as economically successful as it was once considered, calling into question whether such communities are still desired, including by those at the base of the pyramid. Reasons for the decline of the kibbutz are uncertain, but could include changing government policy, overspending, poor leadership, demographic changes, decline in commitment of members, or weakening ideology due to globalisation and the rise of individual living (Heilbrunn, 2005).

Furthermore, the motivations of entrepreneurs vary greatly with reasons ranging from wealth, communitarianism, personal development etc. (Sant'Anna & Nelson, 2017), and it cannot be assumed that local communities in the South African context will have motivations or interests that align to the needs of the community. For example, entrepreneurship may be an avenue to escape his or her local context.

Acknowledgement must be given to the fact the majority of the entrepreneurship and community development literature available for review has a “lack of entrepreneurship scholars who live in and hence experience poverty conditions. Being grounded in settings of poverty facilitates the appreciation, understanding, and accurate interpretation of what occurs within such settings” (Bruton *et al.*, 2013: 684). Most academics come from developed countries, where poverty is not a core problem, and even when researchers are from disadvantaged nations they tend to live well-off lives, distancing them from poverty (Bruton *et al.*, 2013). This is also the case for the researcher conducting this study, and he acknowledges that he will view local situations with limited understanding given the fact that he does not come from an impoverished context.

The reality of the African context is that there are limited resources, including funding, access to credit, infrastructure (especially in rural regions), and social capital. Lombard (2003: 234–235) shares an example that reflects the real challenges:

“In an African context this is a huge problem in the process of shifting a project to becoming a small enterprise. Finding a venue can be an enormous stumbling block, especially if the project requires electricity. Even if such a venue is found, like a church hall, the participants must be prepared to pay for the electricity from the project’s income. If the project is still in a survivalist phase, community leaders should negotiate with the local authority for special rates. Also with regard to infrastructure, it is important that the assets of a project be secure, since many projects go under due to losses from burglaries. Project participants should understand insurance as a necessity and not a luxury and take responsibility in this regard. The lack of infrastructure such as telephones and fax machines can also be a stumbling block in running a small business successfully in an African entrepreneurial context (Kitching, personal interview, 20 August 2002)”.

Though these challenges are real and practitioners (and associated development agencies and corporate companies) should remain cognisant of them, the motivation for pursuing community economic development is strong. By placing responsibility on the community, the process it encourages is empowering and inclusive, and if implemented correctly, follows the needs of the poor. This form of development also incorporates income streams, and sustainable development elements of building social capital and preserving natural resources. All these factors make the longevity of the development effort more likely, and encourage a psychological shift by those most in need, from a recipient mentality to a proactive mindset.

In response to these opportunities and challenges, the first step for development practitioners is that they should ensure that they do not underestimate the abilities of those in economically disadvantaged circumstances, or in the words of Lombard (2003: 237–238) practitioners should change their: “perception of who the poor in Africa actually are and what strengths they have to take control of their own destiny when embarking on a road of entrepreneurship. We need to believe that we will find the same kind of entrepreneurs amongst the poor as those whom Gilder refers to in his book *The Spirit of Enterprise*: “...the movers and shakers, doers and givers, brimming with visions of creation and opportunity... the optimists who see in every patch of sand a potential garden, in every man a potential worker, in every problem a possible profit. They struggle, flounder, work day and night, sometimes succeed and often fail; but they are resilient and keep coming on” (Gresham, 1985:3)”.

It is important to cultivate an enterprising mentality, as it shifts thinking from a reactive to a proactive approach, in which actors can (re)gain the confidence to make bold decisions. For example, people are more likely to pursue entrepreneurial ventures when they consider it feasible and desirable to do so. There are two stages to this process, the first is when people believe that an opportunity exists, and the second is when a person considers the opportunity one that they personally could pursue - critically, the knowledge and motivation of an individual affects both stages

(Shepherd & Patzelt, 2011). Clearly then, individuals with an enterprising mindset will be more likely to attempt such an endeavour.

Due to community development being a highly context dependent process, social workers may have different ideas around their responsibilities toward contributing to economic efforts, and this is commonly influenced by their view on poverty (Lombard & Strydom, 2011). Due to community economic development being a new phenomenon to some, many are likely to underestimate their potential impact and their responsibility to economic activities (Lombard & Strydom, 2011). However, questions should no longer be asked around whether social development has a role to play in economic development, but rather, the question should be around how involved social work should be in economic activities (Lombard & Strydom, 2011).

Development practitioners, who have the appropriate abilities, can support this process by assisting individuals and communities become more self-sufficient and supporting them to engage effectively in the market (Midgley, 1995: 107). This assistance can take the form of improving the abilities of impoverished communities and improving their access to physical and social assets (Lombard, 2003). For example, community workers can involve themselves in assisting community economic development ranging from helping set up micro-enterprises, savings associations, educational classes, skills training or career development programmes (Lombard & Strydom, 2011). Through these capacity building efforts “project members build up esteem, hope and personal empowerment” and through their connections with others, become more powerful (Lombard, 2003: 234). When groups begin to believe in themselves and their abilities, they begin to realise that they can work with others to influence the circumstance that surrounds them – this process of social bonding builds social capital which is critical for community economic development (Lombard, 2003).

In addition to facilitating the process of building social capital, in which communities are given ownership and decision-making power, development practitioners are sometimes able to leverage considerable resources when under the employ of multinational companies. Where resources have been committed to local communities, as in the case of the mining sector and the REIPPPP, companies are able to support processes of community economic development by investing in or co-creating initiatives with communities. By doing so, “MNCs [multinational corporations] have the opportunity to play a meaningful role in local capacity building in a way that not only empowers local communities, but also avoids the paternalism and resource dependency that is endemic in so much social investment in the South” (Nwankwo *et al.*, 2007: 99). Or, in the words of the United Nations: “Beyond meeting basic needs, investments must be linked to the potential to raise productivity and income” (United Nations, 2009). Whether being used in community upliftment projects or in establishing businesses within under resourced communities, a degree of enterprise thinking can both empower locals, and support the continuity of efforts into

the future (Barendsen & Gardner, 2004; Lyons, 2015; Martin & Osberg, 2007; Parrish, 2010). Lyons (2015) considers a market-based or enterprise mechanism to support community development valuable because it can help address economic inequality.

When companies ‘invest’ in initiatives, rather than take the common hand-out approach, there is a level of enterprise thinking embedded, whereby the longevity (in terms of finance and human capability) of initiatives is thought of. In addition, there is often an associated process of capacity building:

“Initially, these partnerships will require high levels of investment and direction on the part of corporations. Over time, if the partnership is to be effective, the dependence of the [community] upon the MNC will need to decrease, with the [community] taking on an identity and purpose of its own. Indeed, underpinning the partnership approach is the assumption that the [community] will learn to operate with a high degree of autonomy; otherwise the investment by the corporation represents little more than an act of philanthropy with all of the limitations that this implies” (Nwankwo *et al.*, 2007: 100).

In the face of overwhelming difficulty, those in poverty may get caught in a scarcity mindset, a psychological condition in which one’s attention is overly focused on making decisions to support immediate survival, at the expense of long-term opportunities. It has been argued that a development approach that incorporates meaningful community development practices, as well as an element of enterprise thinking can assist low income communities overcome material and mental hardship, and contribute to an enabling community environment.

2.13 Conclusion

The Western economic growth path adopted by most developed countries has yielded material excess, but also economic inequality within society as well as widespread ecological damage. Development paths that aim to prioritise economic, social and ecological elements within society have therefore emerged as an alternative. While the South African government has included the concept of such a sustainable development trajectory in many of its policy documents, implementation has been limited, and immense challenges remain unaddressed by national government.

In response, government called upon to corporations support developmental efforts through corporate social responsibility programmes. Many of South Africa’s rural communities are especially in need of support ranging from basic services to economic opportunities. The well-established mining sector has attempted to provide relief to the rural communities surrounding their mining operations, but has primarily adopted a risk-minimising, welfare approach to their development mandate.

The emergence of the utility scale renewable energy sector in recent years represented a new opportunity in rural communities because renewable energy companies were also mandated to spend economic development funds on supporting communities in close proximity to their renewable energy plants. The opportunity, therefore, existed for the renewable energy sector to take learnings from the mining sector to ensure their development initiatives were effective.

The initial practices emerging from the development efforts in the renewables sector indicate that the same mistakes are being made, in that a traditional development path is being adopted, and community engagement approaches are disengaged, and fail to address the psychological factors that are at the core of other, surface-level difficulties faced by the poor. In addition, little attention is paid to the longevity of development efforts. As a result of this, long-term positive impacts on the lives of beneficiary communities are unlikely.

Chapter 1 provides insight into the transdisciplinary research approach: the theory behind the method, relevance to this thesis, and how it is practically used in this study. The aim of this chapter is to better understand the need for community development efforts by corporations, especially in rural parts of South Africa, and explore whether existing practices have been effective. This is done by presenting literature about the aims of development, as well as a comparison of community development practices in the REIPPPP and the mining sector. The comparison reveals several similarities and areas of concern which necessitates further exploration of literature around the topics of effective community development, psychological elements of scarcity, and incorporating enterprise thinking into development processes.

From this, the argument made is that corporations need to break out of the hand-out mentality when engaging in socio-economic development efforts, and take all of these elements into account in their work with communities – development efforts need to take a community engagement approach that focuses on the psychological needs of communities, as that incorporates elements of enterprise and sustainability for the longevity of projects. To test the argument, emerging from the literature thus far, it is necessary to compare theoretical findings to real world examples in the REIPPPP.

3 Chapter 3 – Northern Cape challenges

3.1 Introduction

In Chapter 1, the transdisciplinary research methodology is explained and an outline of the thesis provided. In Chapter 2, the literature review, it is argued that the aim of development projects should be to improve the quality of human lives, specifically those with limited economic resources, while doing so in a way that also maintains and restores ecological systems. Community development efforts by corporates, as

well as other organisations, often take a hand-out or welfare approach. Consciously or not, the approach taken is shallow, patronising, and focuses on the symptoms of a problem, the cause of which is rarely acknowledged. Though it is the intention of the programme, independent power producers (IPPs) are not incentivised to do more than simply spend money, and thus adopt a risk minimising, feel-good, top-down, unreflective approach that results in weak impacts for those supposed to benefit.

This form of development is ineffective because it fails to acknowledge psychological challenges faced by the poor, and a more meaningful social process is required for development efforts to result in improvements in the lives of the poor. Poor communities have limited confidence and are often entrenched in a scarcity mindset which limits their view to focus on immediate needs only, forgoing opportunities that could provide benefit in the long term. Worsening the problem is the limited thought given to the longevity of development efforts, resulting in projects often not being able to sustain themselves once beneficiary organisations are no longer physically present or involved.

In this chapter, the logical step is to explore whether this argument holds true in a real-world setting. The theoretical argument will now be tested against three case studies within the REIPPPP, in different parts of the Northern Cape Province. Each case study captures observations from three different renewable energy projects, made by the researchers during their time in a small rural town in this province. Each project is maintained by different IPPs, each of whom have different community development practices. Insights from the Northern Cape but outside of the three case studies are also included.

3.2 Context and Background

South Africa has for years been plagued by a multitude of social and ecological challenges. Government has made limited progress into improving circumstances, and called on the private sector to contribute through their Corporate Social Responsibility (CSR) mandate. In 2007, the country began experiencing ongoing electricity supply shortages, resulting in nationwide load shedding. In response to these crises, a procurement programme was put into place to secure renewable energy capacity from private energy companies, and to contribute to the improvement to the country's socio-economic situation.

3.2.1 Aims of the IPP Unit

This programme, known as the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), was launched in 2011 by the Department of Energy's (DOE) IPP Office. The programme aims to attract international renewable energy companies to invest in South Africa, and was considered progressive across the world because of the emphasis placed on economic development criteria. In their words: "The IPPPP Office has the primary mandate to secure electricity from

renewable and non-renewable energy sources from the private sector. However, energy policy and supply is not only about technology, but also has a substantial influence on economic growth and socio-economic development. As such, the REIPPPP has been designed to go beyond the procurement of energy to also contribute to broader national developmental objectives such as job creation, social upliftment and the broadening of economic ownership” (IPP Office 2016a).

In terms of their development goals for the programme, the IPP Office is idealistic, visionary and has a developmental intention: “we want to see empowerment which translates into some people who were just sitting and doing nothing become more resourceful and become more income generating” and assist local communities “contribute to their own development” (Anonymous, 2016d). They want to see the available funds used as a capital investment which could catalyse self-sustaining development: “the contributions are... just supposed to be seen as a seed, it’s not supposed to be something that the communities rely on forever” (Anonymous, 2016e). But, given the lack of community development expertise in the IPP Unit, they appear to have discounted the importance of community development skills, insight and experience, and struggled to reconfigure the economic development element of the programme to achieve their desired outcomes.

Since then, the majority of power plants from early bid windows have been built and have been operational for some time. The IPP Office has done well to track high-level indicators such as money spent on procurement, construction and operations, the amount of finance that is and will become available to communities, and the percentages of ownership and employment categorised into South Africans, black South Africans, women, and local communities (IPP Office Independent Power Producer Office (IPP Office), 2016b). In their economic development efforts, IPPs have (as at the end of 2018) spent the majority of available funds on education (39,7%), followed by social welfare (21,1%), enterprise development (24,9%), general administration (10%) and healthcare (4,3%) (Independent Power Producer Office (IPP Office), 2018a). Projects developed by the various IPPs have been broadly similar, and take the form of support for, or building of, old age homes, schools, clinics, crèche, libraries, local parks or other community infrastructure. Other common initiatives include schooling or university bursaries, internships, feeding schemes, food gardens, additional teachers for schools, funding of sports teams or events, technical training and funding of small businesses.

While this is useful, it does not give insight into how the lives of local communities are impacted by these interventions – for example, whether there are improvements in health, education, housing or income generation remain unknown. There appears to be a subtle assumption that any money spent on such projects in economic development efforts will be beneficial, and result in positive impacts. These projects appear to come from a short term, disengaged, aid mentality of development, instead of the embedded and community-driven approach advocated by development practitioners.

In order to better understand the developmental impacts in the REIPPPP, seven weeks was spent in low-income communities surrounding renewable energy facilities, primarily in the Northern Cape. Through this research, some insight into the learning pains experienced in the economic development segment of the programme was gained.

3.2.2 The Northern Cape

The Northern Cape is a dry and arid province with the largest surface area in the country. Temperatures reach up to 43 degrees Celsius in the summer months, and minus 7 degrees Celsius in winter (South African Weather Service, 1990). The high summer temperatures, clear skies, excellent quality solar irradiation and availability of large expanses of land make the Northern Cape ideal for large scale solar facilities, explaining why 68 of the 112 projects procured thus far are in this province (Independent Power Producer Office (IPP Office), 2018b). As of March 2018, projects in the Northern Cape have provided a total of 68 041 job years¹ to South African citizens (Independent Power Producer Office (IPP Office), 2018b).

This is an important contributor to the region where the official unemployment rate, as at 2016, was 30.4% (IPP Office, 2018b: 7). Other more established sectors contributing to employment include the ‘community and social services sector’ (local government) absorbing 28,3% of the labour force, and the agricultural sector, trade, and mining making up 8%, 12,7% and 19,7% respectively (IPP Office, 2018a). Other contributors included ‘private households’ (21,9%) and finance (14%) with utilities making up 4,4% (IPP Office, 2018b: 7). The province has a low population density of 3 people per square kilometre, compared to the national average of 46 people per square kilometre (IPP Office, 2018b: 6). In some areas this is even lower, with one municipality having a population density of 1.6 people per square kilometre and a housing density of 0.5 people per square kilometre (Anonymous, 2016f).

This translates to small communities and informal settlements situated tens of kilometres away from one another, making municipal service delivery and bulk infrastructure, such as sewerage or water pipes, exceptionally costly. This, in part, explains the poor levels of basic services available to low income communities in this region. The clusters of homes are commonly situated along the Orange River, the lifeline of this area in the province. Informal settlements are made either of reeds from the river or corrugated iron, both of which provide inadequate protection from elements, especially given the extreme temperatures, and the large daily temperature ranges.

¹ A ‘job year’ is defined by the IPP Office as: “The equivalent of a full-time employment opportunity for one person for one year” (Independent Power Producer Office (IPP Office), 2018a).

Large distances between towns means that no low cost transportation is available to low income communities allowing them to travel long distances (Anonymous, 2016g). The only realistic option for travelling to major cities is by arranging to travel with car owners, some of whom charge exploitive prices. The local shops, owned by foreigners commonly from Asia, also take advantage and charge excessive mark-ups on their offerings: “stuff is expensive here, no competition means prices don’t fall” (Anonymous, 2016g). There appears to be a reinforcing cycle where businesses leave these low-income communities because locals shop in the major town, resulting in more business, and work opportunities, leaving. In one relatively established community, there is one bank branch open three days a week, and “most services, such as crematoriums, funeral parlours, mortuary services have to come from outside” (Anonymous, 2016g).

The most common economic activity in the area is farming of table grapes which are processed into raisins and mostly exported. Grape farming is a major employer in the area, but the work is low skilled, seasonal, and poorly paid. The huge farms are most commonly owned by white farmers who employ the local coloured population as workers, many of who are plagued by the consequences of the ‘dop system’. South Africa’s inequality problem is blatantly visible here: informal settlements exist alongside huge commercial farmland, while white farm owners transporting workers sitting cramped in the back of their ‘bakkies’ (pick-up trucks), is a common sight. Inequality is deeply ingrained in these areas, and has become accepted as normality. The limited opportunities in the area, and limited access to education for poor coloured communities means that they are not able to see beyond their present reality, with the result that the youth have the perception that their role is destined to be that of their parents’: poorly paid, seasonal farm workers. Understanding and witnessing this first-hand allows one to sympathise with the sense of hopelessness, and lack of motivation seen in the form of idle youth, and the perpetually intoxicated wandering the streets.

Some of the more progressive occurrences in the farming sector around Upington is the emergence of ‘opkomende boere’, or upcoming farmers, who are elderly ‘coloured’ men and women. For the first time in their lives these previously disadvantaged individuals have been given access to land, most commonly by the local municipality, and now have the chance to farm livestock (specifically sheep and goats which do well in this region) in small quantities. Far less prevalent are younger upcoming farmers, such as one individual who managed to secure land upon which he is now growing pecan nuts, grapes and corn or ‘mielies’ on a commercial scale and who, due to his success, is expanding rapidly.

Another big contributor to the economic functioning of this area is the state, which provides grants and pensions which “keep these small towns alive” (Anonymous, 2016h). In addition, a large portion of the labour force in most of the Northern Cape’s small towns is dependent on the local municipalities as employers. In the eyes of

some, the municipality acts as non-profit organisation due to its role as a job and service provider through whom people can get paid without working (Anonymous, 2016g,i). Due to the tightly knit nature of relationships in these areas, municipal officials know the communities they work in intimately, apparent by them being able to greet most of the community by name.

Local government institutions are notoriously known for being inefficient and engaging in shady practices to further their political agenda. For example, a community lacking toilet facilities was only supported when a newspaper article was written about the issues. This incited immediate action from the municipality (Anonymous, 2016g). Aside from being slow to deliver, resources are also often wasted. Sometimes “they will build homes, then roads, water infrastructure afterwards. Then the homes were not in the right places, so they had to break them down” (Anonymous, 2016j). Municipalities have to balance short term projects, which demonstrate immediate value to the community, as well as longer term projects such as building infrastructure which provide great value, but take time to realise. Due to political and other pressures, projects tend to be skewed toward the former to win favour with voters (Anonymous, 2016k).

Unlike South Africa’s major cities, one’s political standing is openly shared in this region. It is common practice for there to be explicit favouritism and deep loyalty among those belonging to a particular political party. For example, if an official within a municipality does not support the same political party, or if instructions that come down from the national branch of a political party are not followed, the individual will become isolated, and the potential for promotion will be completely lost (Anonymous, 2016k,l). Similarly, service delivery or jobs will only be offered in particular areas of a town or community dependent on political alliance (Anonymous, 2016m,g). Similar tactics are employed within church groups who, in an effort to hold power over and gain favour from local communities, are willing to sabotage pastors from other church groups, which can be as extreme as torching cars and households (Anonymous, 2016n). Other examples were given, for example a political group went house-to-house before local elections with ‘kospakkies, wyn, geld’ (packets of food, wine and money) for house-bound ‘special voters’ (Anonymous, 2016j,b).

The emergence of the REIPPPP with its ED component presented an opportunity for rural, poor communities surrounding renewable energy plants. Communities can see, for example, a 200-metre-high concentrated solar power (CSP) tower being constructed in the distance, but have been excluded from the REIPPPP. While some IPPs are making attempts to open site visits to schools and communities, these are among the minority. It is uncommon for efforts to be made to educate the community about the procurement programme, or about renewable energy technology. The result is that the only awareness community members have about the plant is that there are jobs during the construction period. Other than this, communities are completely dissociated from the plant, despite of it being ‘in their back yard’.

3.3 Northern Cape Case Studies

To illustrate the variation around the manner in which various IPPs conduct business with respect to their SED and enterprise development obligations, a snapshot is provided of three IPPs operating in the Northern Cape. The case studies provide insight into the behaviour of multinational energy firms pre- and post-revenue, with focus being placed on findings unique to the IPP, which emerged organically from interviews and semi-structured conversations. At the time of field research all IPPs had recently completed construction and renewable energy plants were feeding electricity into the national grid. The primary difference that emerged was not around community projects that were chosen, but rather how these were implemented – the community development and engagement processes.

3.3.1 Case Study 1

The first case study observes one of the projects from the first bid window, during which many mistakes were made. Compounding this was that the project was run by a company that became notorious for its unscrupulous business activities. Many of the concerns listed below took place primarily during the early stages of the project – especially during the build phase. A combination of community anger, new management, and economic development officials from the surrounding areas both forced and assisted the company back on the right track. However, the legacy left after the build phase of the project is deeply negative in the minds of the project's beneficiary communities, and regaining community trust will take time.

A community member appointed as one of the trustees explained one of the problems the community was least happy about: “the first thing we expected [as the community] was skills transfer. That’s the most important thing, it’s the priority for us. The thing of getting jobs, getting the money, that’s not the issue. You need to transfer skills to give people an opportunity to get into next jobs. [Be]cause now we are situated in the solar corridor and there’s opportunities, but most of these opportunities are being grabbed by the [foreigners]. Our people are only there to be handy[men]” (Anonymous, 2016i). His view was that the IPP believed, incorrectly, that the areas surrounding the plant had absolutely no capacity. For instance, two of the skills requirements at initial stages of the project build stage included steel fixing and concrete casting. According to this individual, many in the ‘catchment area’ had experience in these fields, even though skills are not really needed for this type of work, yet few locals got jobs at the facility (Anonymous, 2016i).

The perceived lack of local capacity is a possible explanation for the disengaged, risk minimising approach IPP used to engage with plant workers. Evidence of this is the use of labour brokers from a different province for the recruitment of the low-skilled work force. According to the trustee, these recruitment agencies rates were excessive, with their fees equalling around 80% of cost to company per worker (Anonymous,

2016i). The recruitment process was further shrouded in bad practice. For example, advertising was done through jobs posted on the internet, to which community members do not have easy access. The trustee claimed to have never seen an advertisement in the local newspaper (Anonymous, 2016i).

Communities were provided with old documents and promises made remained unfulfilled. In addition, CVs belonging to community members who applied for low skilled jobs were believed to have been found in dumpsites. In response to this, one of the community members aggressively commented: “ons gaan moeg raak” (we are going to get tired) followed by a threat that although they didn’t want to, they were willing to take a different, more violent path (Anonymous, 2016h). We want our people working at the plant, not other people coming from outside, they said (Anonymous, 2016h).

Aside from the belief that the community has no skill capacity, another explanation for limited opportunities offered to locals could be lack of interest in the country’s economic development, undermining one of the core reasons behind the introduction of the REIPPPP. Despite the requirements in the bid documents, a disproportionate number of jobs seem to have been allocated to workers coming from the IPP’s home country. Low skilled workers were flown down from the company’s home country as tourists for three month periods without work permits, and were paid inflated wages to work on the site, according to a senior municipal official, the trustee and community members (Anonymous, 2016i,c). Further evidence of this was that most senior positions were allocated to individuals from outside the Northern Cape, many of whom were also from this IPP’s home country and were believed to be paid more than local managers at the same level of seniority (Anonymous, 2016i).

The influx of foreign workers had a significant effect on the local economy. Food and accommodation prices rapidly increased which was primarily of to benefit property owners, primarily white South Africans, and to the detriment of the working class dependent on cheap rental (Anonymous, 2016l,o; McDaid, 2014). McDaid (2014) also recorded increases in gender-based violence, drug abuse, single mothers and teenage pregnancies in some areas. The influx of foreign workers is also believed to have caused a rise in HIV (human immunodeficiency virus) rates and marriages falling apart due to the financial appeal of foreign workers in the eyes of unemployed women (Anonymous, 2016i). The foreign workforce was also widely cited as being ‘hooligans’ that are underhand, rowdy, rude, racist and violent when they are not working on the plant and in the city, such as at the restaurants and malls they frequented (Anonymous, 2016i,o,p,q).

This IPP is also reported to have built additional classrooms for a privileged school at which the managers’ children were in attendance (Anonymous, 2016i). This was not declared at trust meetings, and came to light through a school governing body meeting. The trustee’s concern was that this, and other similar suspicious expenses,

were coming from the ED allocation. This was possible given the limited power being granted to community trusts in the REIPPPP, and the limited financial transparency around ED spend. The relationship between the IPP and the community can be described as disengaged and even exploitative. In community trust meetings, for example, the IPP handed documents to trustees with the expectation of them reading and approving these in the meeting. Even coming to consensus between the IPP and community around community needs was difficult (Anonymous, 2016i). When the SED and enterprise development plan was presented to the community trustees, it had not been done in consultation with the community (Anonymous, 2016i).

Even in the creation of the trust, the IPP seemed to operate with insincerity. The trust was set up during the bid phase of the project, as per the programme requirements. During this time, community members were flown up to Johannesburg to meet the IPP Office, accommodated in hotels, and grand promises were made by the IPP around all it was going to give to the community (Anonymous, 2016l,p). Several years later, the plant build was completed and generating revenue, but management had changed and promises remained unfulfilled. This brought into question the decision-making power held by communities through the trust which, legally, has a minimum ownership requirement of 2.5%. In the words of a frustrated trustee: “are you a shareholder just in name, are you an executive shareholder, non-executive shareholder? What is the purpose of that shareholding?” (Anonymous, 2016i).

Perhaps more out of necessity than choice, the community trust in this project was far more proactive than others. One instance of this is when the community trustees refused to sign off the quarterly report that the IPP wanted to submit to the IPP Office. When the trustees questioned some of the claims made in the report around financial assistance for local businesses, the IPP could not provide details (Anonymous, 2016i). The power requiring the trust to approve reports before final submission was legislated in the trust deed and allowed this community trust some power, which they needed to make use of in order to avoid being exploited. One of the trustees felt that their role could have even been expanded, for example doing the recruitment of the low-skilled workforce through the trust as opposed to using labour brokers. Instead, trustees had to fight for and demand jobs for locals. Even in the case of one of the local community members with an engineering degree, intervention was required by the trustees in order to get this individual an internship (Anonymous, 2016i).

This trust managed to act as a guardian for the community without any funding from the IPP. The trustees felt that the trust could achieve more if funds were accessible to, for example, appoint an independent financial advisor to better understand the financial flows and verify claims by the project company: “workshop us on the financials. We’ll bring our own financial guru. But the trust has no funds to do this. We don’t even have an administrator for the trust. I think this is the game these guys are playing. The more you withhold money from [the trust], the [less able they are] to execute their powers” (Anonymous, 2016i).

In addition to the community trust, the other intermediary between the community and corporate is the economic development official. In the case of this project, this individual has a technical background and is from the surrounding area, which he knows intimately. This economic development official was completely transparent in his engagement with the researchers, and willingly took the researchers to visit the plant, and was even willing to share the economic development report that was required to be submitted to the IPP Office. This individual was subtly pessimistic about the way the company was being run in relation to their community development obligations. For example, being appointed only after the build stage, he had to initiate relationships with municipalities and communities after the fact, as the company had been completely disengaged during early stages. This was true in relation to community engagement too, as the official was now had to manage expectations, and promises not delivered upon.

This individual faced the difficult task of engaging with a frustrated and upset community (Anonymous, 2016h). Promises made in community meetings at earlier stages of the project, under a different set of managers, were not delivered upon. Several community members had since stopped attending meetings due to loss of trust. Comments made, in reference to the IPP, in a community meeting such as “julle het verskriklik pragtige beloftes gemaak” and “mense is dood van hoop” directly translated as “you made terribly beautiful promises” and “people are dead from hoping” are indicative of their frustration. This community meeting was initiated with a short prayer by the ED official highlighting not only the importance of understanding the local context and engaging appropriately, but also the emphasis placed on religious and church groups in these areas. The ED official conducted the meeting in Afrikaans, the predominant local language, spoke in a way that demonstrated respect for the community, especially the elderly. However, there were complaints around the meeting being too early in the day, communication about the meeting arriving late, and transport being poorly arranged – issues which were subsequently addressed.

3.3.2 Case Study 2

The second IPP was the least keen to share information with the researchers, and required a non-disclosure agreement to be signed before being willing to share information about their economic development initiatives. This company had its head office in Johannesburg, where the economic development agents were based. The result was that the economic development team worked closely with management when making decisions, which meant that nominal time was spent in beneficiary communities, hindering their ability understand the local situation and build close relationships with community members. The IPP did, however, make an effort to work closely with the local government from an early stage.

The IPP engaged with the local municipality for permits and local authorisation from the beginning, and felt that they have a strong relationship with the local municipality. The IPP maintained an open line of communication with the local municipality, and tried to keep SED and ED engagements. In the words of the economic development officials: “our relationship is one of the best, I would say. We are open to 24-hour engagement, we are also open to alignment with the municipality, however, we are not open to direction from the municipality. Whatever initiatives they are proposing is to push their own agenda, whether its political or election, and we tend to steer away from that. We’ve also had the tough chats with the municipalities, that’s why we have such a good relationship. We said: ‘listen, we are not governments, we are not trying to take your position within the community, we are a private company we are here to develop people’” (Anonymous, 2016r). This cautious approach is common among IPPs in their dealings with local governments.

This IPP was also proud of the approach they used to select community initiatives to fund. This included putting posters up in the community to invite local community members to send community project and business proposals to the ED team. This team would then screen proposals and discuss these with the management of the firm (Anonymous, 2016r). Within the firm, the ED officials felt that there was no red tape, and that the Chief Operating Officers (CEOs) were easily accessible and engaged in SED and enterprise development activities (Anonymous, 2016s). The CEOs were cautious as they had to approve initiatives and ensure no risk was posed to the company.

An example provided of the types of requests received from the community include proposals to fund a matric dance. When selecting projects to fund, this company claims to steer away from hand-outs, and to stick within the SED breakdown which includes training, skills development and social infrastructure. “We are not about handing out teddy bears, we try to focus on education and training” (Anonymous, 2016s). In addition to receiving proposals which fall outside of their mandate, the officials were also disappointed by the quality of proposals: “you’re dealing with people in an agricultural community, and who don’t have very strong levels of education which translates itself into the requests you see from people” (Anonymous, 2016s).

In the Northern Cape, at the local community meeting, frustration was expressed around this application process. While the community appreciated their efforts, they complained that there was an unmet need for support in completing applications including computer and typing skills as well as assistance with drawing up business plans, company registration, Black Economic Empowerment documentation etc. (Anonymous, 2016r). Some of the other requests from the community at this meeting included transportation for the elderly to apply for and collect their identity documents from the local major town. Other requests included support with recognition of prior learning documentation and support for youth with curricula vitae

(CVs) and interviews (Anonymous, 2016r). Clearly, fulfilment of such requests requires of a more hands-on approach than large sums of money.

This IPP decided to make use of ED officials based outside of the Northern Cape near headquarters meant that these individuals were not as easily accessible to the community. These ED officers flew down to the Northern Cape for community meetings and to attend some district level economic development forums “at least quarterly” (Anonymous, 2016r). The community appears not to consider this arm’s length approach effective: “[the project company] is not very involved. People in [the community] does not understand lip talk, they want to see things happening” (Anonymous, 2016g). The IPP representatives’ approach was exemplified by their engagement with the project community at the time of the community meeting. They arrived shortly before the meeting dressed in formalwear, presented the amounts spent on various projects over the past financial year, and within an hour after the meeting, drove back to their accommodation located outside the project community in the nearby major town.

3.3.3 Case Study 3

In the third example, the IPP took a unique approach to development activities. Instead of viewing their SED and enterprise development mandate as an obligation needing to be fulfilled, they made this mandate make ‘business sense’ by building the directive into their brand. According to the senior managers at the plant, this IPP views their responsibility over the 20-year period that the plant will be operational as not only that of a corporation providing power. One of the plant managers stated that IPPs are entrusted with an opportunity to develop their business, and should behave like they are committed; “we would like to be a citizen of [the local municipality], and that means that we have an accountability, a permanent resident has an accountability towards their community” (Anonymous, 2016t).

To ensure business practices remain in line with their business principles, which the firm holds in high regard, this IPP put formal systems in place. This included a social and ethics committee as well as a clear and aligned plan compiled with input from the local municipality with whom the company had a signed memorandum of understanding. Resulting from such systems is a defined and transparent strategy with which they operate. This includes endeavouring to understand the social context and cultural differences, while not aligning themselves to any religious groups or seeking favour with political parties so as not to damage the brand. In the words of the plant manager, “we do not invest in countries where there is a need to pay someone a bribe to do business, or to cast a favour to do something” (Anonymous, 2016t).

This IPP is one of few, if not the only, to acknowledge frustrations by other beneficiary communities around promises being made by IPPs that could only be fulfilled after the construction of plants. To remedy this and prevent future conflict, the IPP decided to have funds approved for fulfilment of their CSR mandate, which

started at the beginning of the construction period. This meant that as construction activity began at the plant, so too did community development initiatives, which was important to make beneficiaries feel part of the development.

Another of the core elements evident, and unique, in this firm's engagement approach is the involvement and backing provided by senior management to the firm's social commitments: "so everyone is aligned to delivering not only on the power, but also on the community initiatives" (Anonymous, 2016t). This level of engagement was seen even when engaging with the research team. The two senior plant managers were accessible and transparent, were willing to provide more information than requested, and even gave a full tour of the facility.

According to the firm's small ED team, they were proactive in approaching the local school and municipality and asking how they could get involved (Anonymous, 2016u). The municipal manager had a slightly different take on how the relationship ensued with the IPP. The official had the attitude that "you can't set up shop in my backyard without my permission", and so claimed to have had to stand firm and told the IPP "if you want to do things your own way, go ahead. We were here before you, we will be here long after you. We don't need you. We are only advising you on how you execute your business to make sure you don't encounter problems further on" (Anonymous, 2016b). At the time, the official felt that the IPP wanted to use the municipal area as an exhibit, and that this was incentivised by wanting to please national officials (Anonymous, 2016b). Since the difficult initial engagement, the IPP has created a 5-year economic development plan, approved by the municipality, and the parties have monthly meetings.

This particular municipal official was especially proactive, and considered various ways for the local municipality to derive income from the IPPs and is adamant that the IPP should be paying commercial rates, and should be fined due to the land currently being zoned as agricultural. The official lamented the lack of integration of local municipalities into the programme, and the lack of guidance and information provided to local municipalities from the IPP office (Anonymous, 2016b). Because of their engagement approach, which they view as being part of their brand identity, this company has won awards for their community engagements abroad and locally. The municipality has also received accolades and attracted additional external funding as a result of efficient administrative management and as a result of publicity gained from the effective collaboration with the IPP.

3.4 Emerging Themes

These three cases demonstrate distinctly different grassroots-level engagement processes, and the different attitudes taken toward CSR mandates. Findings from these case studies are now distilled.

3.4.1 Engagement Process

The majority of IPPs view their presence in communities as guests and seem to be of the opinion that community members should feel privileged by the presence of IPPs and appreciate their initiatives irrespective of how effective they are. These IPPs take a risk minimising approach to their ED spend, and commonly take a top down, hand out approach in which IPP management decides what the firm needs and should receive. The most extreme example of this is an economic development manager in the Eastern Cape threatening her company's beneficiary community, saying that she would spend money elsewhere if the community opposed her plans (Anonymous, 2016v). There are a minority of IPPs, such as the one in the third case, which take a different view and consider themselves guests in the community who have the responsibility to give back.

The first engagement the IPP has with the community is at the pre-bid stage during which IPPs are required to develop an economic development proposal outlining the development projects they plan to initiate, should they win the project. This, in theory, requires engagement with communities to understand their needs. IPPs commonly "hire consultants to go whip up a plan" just before projects were due. These were based on a surface-level needs' assessment of municipal integrated development plans (Anonymous, 2016s). In some cases, community trustees (trusts had to be set up at before bids were submitted) were flown up to the IPP Unit headquarters, where they "paraded on stage" in front of the IPP Office (Anonymous, 2016l,w). At the bidding stage and at project construction phase, there is incentive for IPPs to over-promise to win bids and community trust, and under-deliver as there is often a shift in management post-construction. Naturally, the result is communities who feel cheated and are upset and no longer trust the process (Anonymous, 2016x,p).

The level of communication between the IPP, and local level stakeholders (the community and municipality) is often weak. Beneficiary and even broader surrounding communities had a poor understanding of what was happening around them, what the implications were, who was involved, and the difference between renewable and non-renewable electricity generation (Anonymous, 2016y,z). To beneficiary communities, the most common comments reflecting their understanding around plants were around some people getting jobs, and the solar plants ("die solars" in Afrikaans) providing electricity. People see movement and traffic around them, but don't benefit, aren't involved, and are not educated about surrounding activities (Anonymous, 2016h). It was common to find individuals from beneficiary communities surprised that the plant had to spend money on surrounding communities. Those that were aware of the economic development money understood that money could not simply be handed to them, and that funds had to be allocated as per community needs, decided by the IPP.

In one meeting, IPP representatives stood in front of the community hall wearing formal suits presenting slides to an audience of working class community members.

The one directed flow of information was received by the community with “thank you so much, but...” type responses when the opportunity was given time for questions to be asked. This is the dynamic seen when communities are fearful of losing the SED and ED financial inflows, but remain dissatisfied that core problems remain unaddressed while IPPs distract themselves, policy makers and the community with hand-out and short-term impact projects. This meeting clearly demonstrated the entrenched power dynamics seen between IPP officials and local communities, and more broadly, between those in control of financial resources, and the poor. The result of this skewed power relationship is the IPP displaying a “look what we did for you” attitude which is telling of a belief held by many corporates – that communities have no capacity, and are dependent on external support.

The influx of well-resourced private companies entering rural South African areas resulted in municipalities feeling threatened by the idea of losing authority over ‘their’ communities. Aware of this and of municipalities notoriously known for being corrupt, IPPs commonly took a cautious approach when engaging with local government. Evidence (mostly anecdotal) of unscrupulous political and financial motivations, validating the belief that municipalities are in fact corrupt, was found to varying degrees within almost every municipality visited. One less extreme example is local government officials ‘claiming’ projects set up by IPPs: [political party] ward councillors say “look what we got for you, we got the IPP to do this...” (Anonymous, 2016c).

The perception of local governments being corrupt is also held at national DOE level, resulting in the procurement programme limiting local government involvement in development activities (Anonymous, 2016e). By design, the only way local government is involved is through the approval of permits, land rezoning, refuse removal and other such tasks (Anonymous, 2016k,b). Despite there being no prescription to involve municipalities, many IPPs, having realised the potential risk of not having the support of municipal officials, built relationships and collaborated with municipalities on projects. Others distanced themselves completely from municipal interests so as not to associate the corporate brand with politics.

Numerous examples were given where, in the case of community unrest, the IPP would turn to the municipality who would intervene (Anonymous, 2016h). This is illustrative of municipal officials having deep knowledge of the local communities; their needs, the people, the social complexities, cultural norms, appropriate practices etc. Thus, not being granted any control or say in the IPPs’ ED activities, which overlap with local government’s development mandate, was a serious cause of frustration for many municipal officials (Anonymous, 2016o, b, h, x,aa). They also felt that this was a lost income generating opportunity for cash-strapped municipalities.

These officials were disappointed that no communication about the programme came from the Department of Energy (Anonymous, 2016v, x, aa, 1,b). Almost all the municipal officials first learnt about the programme when energy developers contacted them for initial discussions. Officials therefore knew very little about the programme in general, thereby reducing their ability to involve themselves or support processes meaningfully. For example, during a conversation with one local government official in the Western Cape, this individual's comment was "you guys [referring to a team of researchers] have opened my eyes, I thought this is happening far away, but it's happening here" (Anonymous, 2016x).

In another scenario, one of the municipalities in the Northern Cape was deeply upset about poor delivery by an IPP to the community. Their frustration and anger was misdirected at an individual representing a development finance institution (DFI) who took it upon himself to try to explain the programme in more depth, including the roles and responsibilities of the different players involved in the programme. This process, he said, was required in more than just this area and had to be done multiple times before officials started to become comfortable with the technicalities of the programme. Making processes such as these more difficult are cultural and language complexities. The DFI representative initially started his presentation in English, which further upset an already rowdy audience of municipal officials, and was forced to revert to the predominant language in the area, Afrikaans (which luckily, he could speak, albeit with less confidence) (Anonymous, 2016ab).

In essence, what is seen here is a central authority (the DOE) wanting development at a grassroots level (low-income, generally rural, communities) using renewable energy companies to enact this mandate. To these private, mostly international, energy corporations whose skillset lies in building technical renewable energy systems, community development becomes an arbitrary, secondary objective. The local community and municipality, not being provided any formal authority, are left out of this arrangement thus re-enforcing existing top-down power dynamics, and re-enforcing the notion that communities have no internal capacity. The result is that the development efforts aimed at improving the lives of local communities becomes prescribed to them in a way that is paternalist, seldom inclusive, and most often has positive impacts only in the short term.

When it comes to the implementation of ED initiatives, IPP's high-level management, who are financially motivated, are the final decision-makers. As they are mandated to put shareholder interests first, management takes a risk-averse approach to development initiatives, and therefore generally take a box-ticking and compliance approach. The implementing agents on the ground, the economic development officers, often know communities well but have little independent decision-making power when it comes to ED initiatives. ED officials are simply required to follow the initial economic development plan which was submitted to the DOE at bid phase. The years between project bid and revenue generation often make

these plans less relevant than they should be. Because they were drawn up by consultants (prior to ED official appointment) in short time frames, effort was not made to understand the social context and complexities of communities.

Even though the IPP Office appears to be reasonable about deviation from the initial plan, management of IPP firms do not seem inclined to update ED plans and re-orientate development efforts appropriate to community needs. In the word of an ED officer: “[at revenue stage] I can go to the same community and say okay, these were the needs [at bid phase] and submit that [as a quarterly report] and there’s no way of them making me noncompliant in terms of that specific plan. So that plan does not have any substance in any way or form, it’s just to understand at that point in time if the IPP has understood the needs, and how do they plan on addressing them” (Anonymous, 2016s). ED officials, the implementing agents, are therefore forced to stick to this plan and ensure that correct finances are spent according to deadlines, defying meaningful community development practice which advocates slowness to understanding the local context and opportunities, gain trust, and allow for ideas to emerge (Mansuri & Rao, 2013; The 4th Barefoot Guide Writer’s Collective, 2015). Compounding this requirement, the ED officials themselves rarely had community development or similar education or experience and in no examples, were equipped by the IPP with training courses, mentorship or similar support, an indication that IPPs regard community development as something which can be done without expertise.

Economic development representatives were most commonly hired from the community or nearby communities and are therefore often deeply and genuinely invested in making positive changes in their community, know the people and understand the challenges (Anonymous, 2016j). In two of the three cases, the ED officials were local individuals who understood the community well. This reflected in the relationships these individuals had with the community, and municipal officials. As these individuals drove through the communities with the researchers, they verbally engaged with most of the community they came across with a certain familiarity and a clear knowledge of current events.

In other cases, ED officials are hired from outside areas. Some of these individuals constantly appeared to be in a rush – rushing to and from community meetings and district forums. Their relationship with community members was evidently more formal and seemed to be shallow. In another example, where the senior ED official was from outside the community but took time to learn the social dynamics by living in the community, what was seen was quite different. In this Eastern Cape project, there was violence between the IPP’s beneficiary communities. The appointment of an official from outside the area was vital to bringing a level of objectivity to ED decisions (Anonymous, 2016ac). Despite this, the individual received death threats, and heard community members walking around the house this individual was living in

at night, illustrating the level of desperation in these communities (Anonymous, 2016ac).

3.4.2 Reputational Risk

Management of IPPs were especially reluctant to meet with researchers. In most cases, the researchers did manage to meet with ED officials, many of whom had been cautioned by their superiors. No financial figures were shared, and sometimes even information around community initiatives was withheld. One IPP required researchers to sign non-disclosure documents before agreeing to a semi-formal meeting. “I think what they [management of the firm] want to do is, specifically make sure that, for instance, you don’t mention our communities (Anonymous, 2016s). “So, we just want to make sure that in your reports and anything that is going to be public, that our own competitors are not able to identify [who we are]. We want to help you as much as possible, but also want to make sure we don’t expose ourselves to any form of [reputational] risk” (Anonymous, 2016s). IPPs closing themselves off to a basic level of exposure prevents any potential for them to learn and improve as well as the ability of others to learn from their mistakes. Furthermore, it further reinforces existing power dynamics as it allows IPPs to operate with a certain degree of untouchable-status, and a resulting arrogance.

This mentality, stemming from the IPP documents which required initial ED development plans to be submitted in confidence, causes serious hindrances to learning from one another and limits collaboration, for example at district level forums. However, there is little evidence to show that IPPs would behave differently even if there was a well-documented body of knowledge around rural community development best practice in the REIPPPP. Substantial research has been done around CSR in the mining sector as government mandates mines located in rural settings to spend money on developing surrounding low-income communities. Despite many lessons and insights being documented, development practices have had similar shortfalls in both the decades-old mining sector and more recent renewable energy sector. A more compelling argument for the limited long-term impacts resulting these development efforts are that corporations are not sufficiently incentivised to do meaningful work, and therefore operate with the same technical and short-term mentality used in ordinary business practices.

3.4.3 Ruthless Efficiency

A senior engineer provided some insight into the ruthless efficiency with which IPPs operate to maximise profits: “the programme is structured so aggressively, you’ve got to put your bid in, and then you’ve got to hit the start button, and once that thing is signed, that’s it, you run – till the end of the project. Because it’s so capital intensive you’ve got to run as quickly as possible otherwise your interest payments on these things [become excessive and] profitability you lose. The nature of the beast is such that there’s absolutely no ability to develop certain things” (Anonymous, 2016c). “A project gets an EPC contractor [usually international] and that’s where the cash goes:

supply chain and construction. Very few South Africans are doing this, we need to do the value adding, strategic, highly skilled stuff locally” (Anonymous, 2016c).

He went on to explain that SMMEs (Small, Micro and Medium Enterprises) are further excluded because big energy companies were able to set up subsidiary companies (just for the build period) and benefit from short term ‘get out of jail free card’ from Black Economic Empowerment (BEE) requirements (Anonymous, 2016c). However, smaller South African companies that were trying, but did not have the appropriate approvals and certification (such as BEE or value-added tax requirements) could not compete and benefit from such contracts (Anonymous, 2016ad,c). For example, in the Northern Cape, transport was required for workers needing to get to the solar facility being built. Instead of hiring local taxi owners, this IPP hired big companies who have collateral to back up contracts signed. This allowed the IPP to have some recourse, if for example, a taxi was late. Other contracts, such as truck cleaning, were not given to locals either (Anonymous, 2016ad).

The level of efficiency at which IPPs operated limited the time spent on projects, and therefore the transfer of skills to smaller, local firms and workers (Anonymous, 2016h). When operating at such tight margins to maximise profit to shareholders, exploitation of workers and the local companies is an unsurprising outcome. Using this short term, rapid building approach, IPPs are able to achieve their goal: the rolling out of advanced technical systems, to generate electricity from renewable sources, within short time frames. The unknown variables are few and eased by strong support from national government. In the case of community development, ‘success’ is far more opaque. Success, beyond the minimum requirement of a certain amount of money needed to be spent, is left up to the IPP to define. Defined or not, development objectives are far more difficult to achieve when the task is more complex than installing tried-and-tested technical systems and in which each context is dramatically varied in complexity. IPPs continue to use their ‘ruthless efficiency’ and short-term mentality in their community development practices.

3.4.4 Compliance and Lasting Impact

Beyond the approach taken by IPPs, projects with weak-long term sustainability are also a symptom of the IPP Office’s directive being vague, as well as the lack of standard measures by which economic development can be measured (Anonymous, 2016c). This allows IPPs a great deal of flexibility with which to interpret the bid documents in ways that fit their agenda. On the ground, this translates into the implementation of poorly thought-out development initiatives, with little to no follow-up support: “there’s no [financial] sustainability criteria on this stuff – they can just spend on a fish and chips shop, even though they know its failing. That counts as ED spend” (Anonymous, 2016c). IPPs having free reign, with financial spend being the only measurement, makes it easy to ‘buck the system’. The result is communities becoming despondent, reflected through comments such as “no one is watching these

guys”, “for them it is a nice to have, for us it is very important” and “for the [IPP], it’s just to adhere to legislation in south Africa” (Anonymous, 2016i).

An engineer working in the REIPPPP cautioned “we have to be careful, because everybody’s going to write reports saying they did this, they did this, they did this. I’ll give you an example, in [a project community] they had this business training thing [about] writing business plans. People fly in to take photographs, but it’s not going to have any [financially sustainable effect]” (Anonymous, 2016c). Countless similar example exist, such as a library being built but remaining closed due to no librarian being appointed (due to poor consultation with government departments prior to building), a park being inappropriately fenced against the recommendation of community and subsequently being vandalised a few weeks thereafter, and funding being provided to start and initiate a purification plant only to find out that all government water contracts were already allocated (Anonymous, 2016l,v).

The flexibility IPPs are allowed results in a compliance and charity culture approach to community development. The lack of incentive is also visible: commenting on IPP that flew in from their office headquarters for a district forum, a participant asked: “why are guys leaving early? Because there’s a plane to catch at 1 PM. Are they really involved in those communities,” he asked? (Anonymous, 2016c). To summarise the behaviour of IPPs as a result of the lack of incentives, direction and monitoring, this individual cited Dr Eliyahu Goldratt’s quote “tell me how you measure me, and I will tell you how I will behave” (Anonymous, 2016c).

3.4.5 Measurement

After more than two decades working in government, an official working in agriculture understands the need for at least some level of measurement: “from our department side, we have to spend money, spend money, spend money, but we never capture the impact that is made. We’ve spent a lot of money but the question is how do we measure the impacts? That was never done” (Anonymous, 2016a). For example, he said, they could provide a farmer with a water tank for R50 000, which can dramatically support his production, or spend R2 million for a fence to secure the property. If the goal is to increase profitability, in terms of value for money, the water tank is a far better spend, he explained (Anonymous, 2016a). Measurement becomes important because it forces IPPs to set clearly defined goals/ targets, and find financially and time efficient ways of achieving these. Setting defined targets allows IPPs and the regulator to track progress and impact of IPP programmes.

3.4.6 IPP Office

It is easy to criticise the DOE IPP Office in hindsight for setting up economic development requirements that measure IPPs solely on their financial spend on community projects. This weakness in the IPP Office’s procurement documents must be taken in context with its successes. This segment of the DOE had to gain international investor confidence in South Africa at a time when the political climate

was uncertain, and growth rates low. The country had no history of large scale renewable energy prior to the REIPPPP, meaning that prospective renewable energy developers were heading into unknown territory.

IPP Office needed to operate within restraints set by National Treasury, furthermore, pressure was placed on the DOE to act quickly as Eskom was not able to keep up with national demand, with resultant regular national power cuts. At the time of writing, Eskom has delayed signing 37 new deals with IPPs for several years, which amounts to R58 billion, for reasons that appear to be politically motivated (Slabbert, 2017). After changes made at national government level, the Procurement Programme gained momentum again, with 27 projects being signed, amounting to R56 billion in revenue (African News Agency, 2018). It is within this context that the IPP Office has had to operate, and has done exceedingly well to attract R201.8 billion and 6 422 MW of signed renewable energy generation capacity (IPP Office 2017).

The incorporation of the ED element of the programme made the REIPPPP progressive in the eyes of the rest of the world, and is a framework which can be improved upon for other developing countries in which future renewable energy growth is likely to lie. Though it appears that there have been limited meaningful impacts resulting from this ED spend, the DOE has succeeded in unlocking significant finance for low-income communities. The opportunity or “nice problem to have” lies in finance being available for low income communities, and now is required to be used effectively (Anonymous, 2016e,d). The DOE has placed itself in a position where it needs to play, and keep playing, a significant role in trying to ensure that development efforts achieve what they intend to, and have been effective in adjusting and updating the requirements as they learn more about the weaknesses of the programme. For example, they have changed the frequency of ED reporting (and associated financial spend commitments) from quarterly reports to annual reports to account for the longer-term view needed to be taken in community development processes.

The reason that there is so much responsibility on the DOE is because only they have a degree of legal control over of IPPs, as only they can penalise IPPs for non-compliance. Excluding local actors like the local community from the programme, due to the impression that there is no capacity, and the municipality, due to the perception of corruption, has handicapped them from being involved and contributing to processes which are intended to improve their lives. Ignoring these local actors places further pressure on the IPP Office, as they have to fulfil the roles of monitoring, intervening and supporting initiating processes. IPPs feel it only necessary to answer to and engage with the IPP Office, and therefore do not engage meaningfully with communities, municipalities, other IPPs or in collaborative forums.

An example of unsatisfactory engagement can be found at one of the district-level development forums, created as a platform for engagement between IPPs, local

government, local business etc. The meetings were relatively well attended on a regular basis, but inertia was evident among the stakeholders – beside providing an opportunity for stakeholders to meet one another, little concrete results came from this forum as no single stakeholders seemed willing to share experiences and lessons learnt in their development efforts, let alone drive transformative and collaborative processes or projects. According to the individual chairing this meeting, things were more progressive when the IPP Unit attended meetings (Anonymous, 2016ae). Another reason for the limited success was a passionate key senior level official leaving the region, which resulted in a loss of momentum (Anonymous, 2016ae). As is evident in this example as well as the case studies, IPPs will only meet the minimum requirements, unless incentivised or compelled to do otherwise.

3.4.7 ‘African’ Mentality

One engineer felt that the programme was too submissive and was a display of what he called an ‘African’ take-what-you-get-mentality as opposed to pushing local content hard, and having had local industry ready by the time IPPs arrived (Anonymous, 2016c). He compared the programme to his opinion of what China would have done, which would have included aggressive pro-China policies (Tang, 2006). “We’ve got to put things in place that look at things that are in our own interests. We need to build industries that, for example, make heliostats, not [micro businesses]. I don’t mind SMEs, but I think they’re taking focus on the big fish away” (Anonymous, 2016c). He went on to suggest that a testing programme could have been developed which could have approved the quality of products used, thereby maintain control within the country (Anonymous, 2016c). In a way, the DOE ‘played it safe’ by not forcing significant local industry and content can be compared, on a different scale, to the poor self-belief in local communities. The ‘African take-what-you-can-get’ mentality is seen when parties are willing to accept less than they potentially should have, and engaged with powerful, international corporations from a position of weakness.

The economic development element built into the procurement programme is illustrative of a good intention for national benefit which is partially strangled by legal, political and organisational limitations, partially by misaligned incentives and power dynamics, and partially by limited knowledge and experience around effective community development practices. The programme, designed by lawyers and technically competent individuals, created technical system which fall in line with the conventional development logic that socio-economic problems require a hand-out of money, and operate with the assumption that in the absence of corruption, this money would be efficiently utilised. What has not been taken into account is the exceptionally difficult and complex social conditions in each community. Also understood to a limited extent is that that the processes required to create effective, lasting community initiatives that improve lives requires time, multiple iterations, passion, deep community engagement and a great deal of specialised skill.

3.4.8 Social ills and Poverty

The social circumstance under which many low income ‘project’ communities live in South Africa is dire. Many of the well-known problems include alcohol and drug abuse, teenage pregnancies, poverty etc. Understanding the extent to which these problems exist, and why this is so, should be the first step if they are to be alleviated. In the Northern Cape, some families are so financially strained that bread is baked and consumed as the primary form of substance for the month because it is cheap and filling. The remaining money is spent at the tavern: “they drink away their money because there’s just no hope” (Anonymous, 2016af). Livestock is also often stolen for consumption, or to sell, because the level of desperation is so high (Anonymous, 2016n). Some parents give the school money to transport their child to soccer matches (nearest team is 120 km away), and then have to forgo meals for the day (Anonymous, 2016u).

3.4.9 Hopelessness

Growing up in such conditions, and knowing nothing else, is particularly demotivating for the youth who subsequently have no ambitions or desire to study further than high school (Anonymous, 2016u,af). One interviewee felt that there is a nationwide education problem, and that schooling needs to be more closely aligned with the skills required in the private sector: “what’s the point in pushing people to get good results if you can’t get a good job. They are the leaders of tomorrow, if we don’t equip them, they are going to miss out (Anonymous, 2016g). The frustration of having an education, but not being able to get a job adds to the low morale of students: “I had all these dreams in high school – now I have a matric but look where I am” (Anonymous, 2016af). This demotivation which exists among the youth results in students being willing to “jump on a taxi and go to a bigger city with the intention of becoming a domestic worker” and young girls getting drawn into prostitution when, for example, a large male workforce gets contracted to build electrical infrastructure in the area (Anonymous, 2016g,u).

The biggest hurdle faced, especially by the youth in these low income communities, is a lack of motivation and self-belief: “there’s something holding the youth back in [the project community], they don’t know what possibilities there are outside” (Anonymous, 2016g). The youth have “tunnel vision” (Anonymous, 2016g) and “don’t see opportunity beyond the life they know” (Anonymous, 2016u). The reality at present for the youth is one of hopelessness, hardship, suffering, difficult living conditions and substance abuse. The REIPPPP, especially for those involved with the youth in project communities, was an opportunity to expose the youth to that which could be, if they looked beyond their existing circumstances. The failure to involve the community, especially the youth, in these multi-million Rand renewable energy plants was among the biggest disappointments for those working with the youth, and communities (Anonymous, 2016i, u, g, n,o,ag).

3.4.10 Agriculture in the Northern Cape

The poor level of motivation is one explanation for the limited interest by the low-income communities, especially the youth, in agriculture, the biggest economic driver in the Northern Cape. “The work is very hard. You need to be able to find your feet, but there is lots of opportunity for the youth to get into farming” (Anonymous, 2016j). When asked whether there are successful ‘upcoming’ (non-white, first-generation farmers) farmers in conversation with a coloured farmer and ED official, the response was: “nee! In ons geval ons wil hê dat dit alles vir ons gedoen moet word, vir my is dit ‘n probleem” (No! People just want things to be given, for me that is a problem) (Anonymous, 2016j). An official working in the Department of Agriculture, who was also a farmer, had a similar view. Referring to upcoming farmers: “ons wil nie meer dink nie. Daars nie meer innovation nie, ons wil net vat as is” (we don’t want to think anymore. There’s no innovation anymore, we just want to take as-is) (Anonymous, 2016a). Or, in the words of another interview: “people don’t want to take opportunities, but when they see success then they want to jump onto the bandwagon” (Anonymous, 2016j).

3.4.11 Local Mentality

The lack of self-belief limits the communities’ expectations, resulting in the mindset that they are only worthy of low skilled, low paying jobs. Communities across the various provinces therefore all appeared to be less interested in economic development initiatives, and more interested in job opportunities coming from plants: “just give us jobs, if we could just have jobs...” (Anonymous, 2016ah). The expectation was that everyone, schooled and unschooled should get a job from the project company (Anonymous, 2016u). From the viewpoint of the privileged, this likely appears to be laziness, or what is known as ‘entitlement culture’. However, if time is taken to understand the situation, one comes to an important realisation around why this poor self-belief and hopelessness exists. For decades, many were oppressed and conditioned to be seasonal, poorly paid farm workers, and stay workers: the “white government said ‘you’re not good enough’” (Anonymous, 2016ag,a). Unlike farmers handing down farms and knowledge to their children, no wealth could be passed down from one generation to another among the poor working class. Instead, what was passed down was difficult life circumstances, with the majority getting trapped in a vicious cycle of poverty. No opportunity was given for these individuals to build financial or social capital, or dream of a better life.

3.4.12 Hand-to-mouth Mentality

After years of conditioning and working as labourers and earning wages which only allowed hand-to-mouth living, it is no surprise that no saving, financial management or financial planning culture is present within these communities. “People have TVs and DStv [subscription television channels] but no food” (Anonymous, 2016af). What this means for poor communities is that the little money they do earn gets spent very quickly, and cannot be maintained. An official from the Department of Agriculture with extensive experience in supporting smallholder farmers explained:

“We had a project where we gave 70 ewes, just to farm, and they didn’t even have to return anything back. If I go back now to see how much of the ewes are left...” (Anonymous, 2016a). “If they see 1 million Rand in the bank, they spend it. It’s about the management. Most of the time they need that, the money, but not the means to generate money [productive assets such as livestock]. There’s one farm where they’ve got a mentor. When the mentor was involved [with] those farm workers, they thrive! Everything, their water bill was paid up, they’ve got transport, everything was sorted out. But the moment when [the mentor] left, chaos. It’s now three years down the line when the mentor left. They’ve got a state farm. Two of them is now on the way out of the farming. Out of the farming! They [were] well established commercial farmers” (Anonymous, 2016a).

3.4.13 Attempts to Help

There have been other attempts to support the local community, including by a local high school. “From our side, we try to break that circle of poverty. The biggest challenge is to become a more motivational school, just to get them to finish matric. The school tries to shift mentality from ‘I can’t do this, I can’t do that’” (Anonymous, 2016u). Teachers feel that they need to play the role of a policeman, social worker and psychologist and thus blame poor parenting, whereas parents hold the school responsible (Anonymous, 2016u). The principal of the school explained some of the challenges they face:

“If you arrange a Saturday extra class, you have to arrange transport, food and so on as well. The tutors are the teachers (unpaid) who make their time available. They (the students) don’t come, just because they don’t have the self-discipline, and that’s also because of the lack of support at home. The kids don’t have motivation. They can only fail once per phase, so they sit back and fail because the system promotes them through. It’s demoralising. You believe you can change the community through education. But after 20 years nothing has changed, if anything it (social ills in the community) has increased” (Anonymous, 2016u).

One IPPs provided young learners with bicycles to reduce the distance they would have to walk to school on a daily basis. It was found that over weekends these bicycles would be abused and damaged, most commonly by relatives and friends of the students. The result was that the school and IPP required the bicycles to be left at the school premises on Friday afternoon, and collected for use again on Monday morning (Anonymous, 2016j). These examples show that physical items handed out need to be accompanied by a system that is appropriate to the context and needs. The bicycles given to children, for example, included training for children, strict rules and a small workshop for maintenance.

3.4.14 Government Approach

There have been many previous attempts to support low income communities. On a national scale, government's approach to development and the improvement of lives for the poor primarily takes a social welfare approach (Doneva, 2010; National Treasury, 2017). Evidence of this is South Africa's social expenditure accounting for around 4% of the country's gross domestic product. Grants (including old-age, child support, disability etc.) make up 20.4% of total social services spend which, in many cases, are handouts which in these local communities have limited long term benefit: "[referring to childcare grants] that money she received ends up in the shebeen [informal tavern], and doesn't reach the children" (Anonymous, 2016u). "The old age in the community live in fear of their own relatives, they live in fear of receiving that money. They get verbally and physically abused by their children or grandchildren" (Anonymous, 2016u).

Local governments operate with a particular mindset in their community development efforts. "For me the thing is, in communities, municipalities have spent quite a lot on the parks. Look at the conditions of them now. The grass is not even there. You can develop a park [but then you need to] lock the park" (Anonymous, 2016a). This type of non-generative, feel-good project spend is common where there is little long term impact, and the longevity of the project is not well thought out. IPPs having followed suit, further instilling the existing power dynamics and mentality of an external provider (government or the IPP) who know best for communities who should remain inactive, excluded and recipients: "[community work] must be a joint venture, [municipalities should ask], 'what is the need in our community', not 'I think the need in your community is'" (Anonymous, 2016a). This in turn reinforces the idea of 'entitlement culture' which is underpinned by a poor self-belief and a sense of hopelessness which currently exists in low income communities. "Government spends on skills development, but not supporting them by working on motivation and self-worth" (Anonymous, 2016ag). The official working with small scale farmers gave examples showing how hand-outs have limited impact, and create certain attitudes in communities:

"Especially in communities where community projects doesn't work, if the work is there, no one wants to be part of that, but if there's income, everyone says 'it's our project'. [The mentality is that] when the work must be done, you are responsible, when there's income that's generated 'I am responsible, it's my income'. I think it's a [precedent that has been set]. It's a given: 'I must be assisted by government'. For example, in one project, I planted maize, did the soil prep, did the planting, did the harvesting, I even paid the farmers to water their own irrigated land. I even sold their maize, deposited their money into their bank account. For them the land is now developed, it's just the next season they have to do it their own. That land is laying fallow now. Nothing's happening there anymore. Now you ask yourself, why aren't these farmers moving? You can only help farmers who

want to help themselves. Or at least try, try to help themselves. We can't work with grants anymore. Give farmers loans with minimum interest, or without interest. They must repay that loan, there must be a responsibility if you receive. You can't receive everything. The moment you spoon feed farmers, there's a tendency [to believe] that it must be like that" (Anonymous, 2016a).

'Entitlement culture' is the notion that the South African poor feel they are owed money, land etc. without having to work for these because of the past injustices they had to endure. This entitlement culture is often thought of as the reason behind a perceived laziness and expectation among low-income groups. While evident throughout the country, these are symptoms of an underlying cause: diminished levels of self-belief and confidence resulting from decades of oppression. This appears to be a deeper cause behind many of the social ills seen in these low-income communities and has significant implications for the ways development efforts should be approached. If the aim of community development initiatives is to create lasting improvements in the lives of low-income communities, these fundamental, 'soft' psychological challenges need to be focused on, and cannot be replaced by risk-minimising, feel-good, surface-level, band-aid, hand-out, or aid approaches to development. Such practices may provide short term relief, but perpetuate poor levels of self-belief and agency in communities, and maintain the status quo of poor communities being dependent on external support.

3.5 Conclusion

In the previous chapters, it was argued, based on findings from literature, that community development efforts by big business fail to pay adequate attention to the psychological challenges faced by those in difficult economic situations. The result of this is a hand-out and disengaged approach to engagements with low income communities. This, according to the literature, is a violation of effective community development practices, which advocate for a slow, respectful, deeply collaborative approach that empowers beneficiaries. Other weaknesses identified include limited attention paid to ecological consequences of development efforts, and limited thinking around the continuity of development initiatives.

The purpose of this chapter is to compare the findings from literature to observations in the REIPPPP. This was done by documenting three case studies around three renewable energy projects in rural parts of the Northern Cape from in-person engagements. Findings from the field research in the Northern Cape confirmed findings from desktop research and contributed further insight into the limitations of current development practices.

This chapter demonstrated clearly through real examples that incentives, community development skills, and a deep understanding by development practitioners of the

challenges (especially psychological) faced by the poor are lacking. Entrenched power dynamics, and associated belief systems and mentalities, is at the core of the limited engagement and communication that takes place between the energy production companies and local beneficiary communities. This chapter also shows how different attitudes to community engagement by IPPs can change the outcomes of community development efforts. Furthermore, this chapter is able to provide insight into the complexity of community development practice for all stakeholders involved.

In light of the challenges identified thus far in the literature and in practice, it is now necessary to understand what development practitioners and organisations should be doing to achieve some degree of ecologically and socially sustainable development. To do this, the next chapter explores five international ‘best practice’ case studies that have been documented in literature.

4 Chapter 4 – Best practice case studies

4.1 Introduction

Chapters 2 and 3 uncover that community development efforts in the REIPPPP have had limited socio-economic impacts. This is largely due to companies taking a top-down, hand-out approach when working with communities, which results in band-aid type community development efforts that superficially address the needs of poor communities. Through the theoretical insights provided in Chapter 2 and real-world observations in Chapter 3, the importance of collaboration and deep, respectful engagement becomes clear, especially considering the mental difficulties faced by low income individuals, as does the importance of long-term thinking. The Northern Cape case studies, in particular, show how different skillsets and attitudes by development practitioners can dramatically change the results from community development initiatives.

In this chapter, in order to discover ways in which these efforts can be improved, five best practice case studies from around the world have been compared to one another, and to existing practices. In selecting these case studies, each had to demonstrate the thinking outlined in this paper and incorporate into their community development efforts: a respectful engagement approach with high degrees of collaboration, a degree of enterprise in their projects, and a sustainable development focus. However, the author found it challenging to attain high quality qualitative data that explicitly addressed the sustainability element (as in the final two examples) in addition to the others, forcing the author to make the sustainability criteria optional.

In addition, each case study is required to be in a developing country context so as to ensure the examples are relatively comparable to the South African context and the developmental challenges it faces. Finally, each case study needs to have three sources of information to limit the risks of ‘window dressing’. It must be acknowledged that in the majority of cases, the case studies were documented by those involved in the developmental project, likely resulting in bias. Rather than closely interrogating the case studies, they are used to give an indication of how the principles outlined in this paper can be incorporated in community development projects.

4.1.1 Poverty Stoplight

Poverty is complex, and varies greatly, as individuals can be poor in a variety of areas. Overcoming a state of poverty therefore seems overwhelming to those accustomed to adverse circumstances, making motivation one of the first steps to be taken: “the poor must first believe that can move into the middle class before they can accomplish it” (Burt, 2013: 57). The Poverty Stoplight approach was developed in response to this and begins with a visual survey “to help impoverished families

understand and take stock of their reality” (Burt, 2014). The survey captures data for 50 poverty metrics, grouped into six categories, allowing families to understand exactly where they are poor, and to what degree, so that they can incrementally improve their situation through interventions personalised to their specific needs. Ultimately, the process aims to promote economic self-dependency, and to eliminate, not just alleviate, multidimensional poverty completely (Burt, 2014).

These metrics are captured digitally, and deficiencies are displayed on a dashboard. Core to the tool’s success is empowering the family by putting them at the centre of their own progress: “creates a customized plan to prioritize their problems and overcome them with the help of existing resources in the community” (Bane, 2016). “One family may have an income gap or mobility problems that are holding them back; their neighbours may have entirely different challenges” (Bane, 2016). For both the urban and rural poor, being able to plot their current situation on a chart and visually see the next steps motivates families to think of themselves “less as beneficiaries [of aid] and more as empowered agents of change”, making this approach “a respectful, insightful, and exciting tool for change” (Bane, 2016; Kelso, 2016).

The programme has several components that work alongside the survey tool. Microcredit, used as working capital, reducing their dependency on loan sharks, is provided to families through village bank advisors who assess the causes of their clients’ poverty problems, and motivate them to change to overcome these (Burt, 2013). “We knew that microfinance worked, not just because of its financial strategies and strengths but also because it tapped into poor clients’ dignity, self-respect, and self-reliance” (Burt, 2013: 59). In addition, there is a strong emphasis on community support, skills development and entrepreneurship education for rural youth.

The approach, started in Paraguay by Fundación Paraguaya is now prevalent in more than 25 countries, including South Africa. Practitioners using the tool in the local context found that the approach is not just a set of questions, and leads to a holistic understanding of the participants’ situation. Opening communication channels allowed those from more privileged backgrounds to understand the reality of the social context: “what I took away was a tangible understanding of what poverty really looks like on the ground”. It was very much an ethereal concept, and you can strategise about things until your physically see peoples’ brokenness” (Saner in Bergh, 2017). Tracking metrics also meant that practitioners were forced to validate their organisation’s strategies, impacts and purpose. This allowed practitioners to focus on areas of real need, not addressing needs according to their opinions. “It has helped us individualise these families and not just to say ‘these are poor people, these are vulnerable families’. From the stories of the people who were already surveyed, that it empowers them, to see their dreams. To dream again and to see their future change” (Ndengezi in Bergh, 2017).

4.1.2 Grameen Bank

The Grameen Bank, is another initiative that uses microloans as a tool for poverty reduction. The Grameen Bank started in Bangladesh in 1976 when the founder, Muhammad Yunus, came across a lady working with bamboo who sold bamboo stools. She depended on a local money lender for cash to buy the bamboo inputs for her products. He lent her money on condition that she sell her products through him. He would pay her an exceptionally low price, effectively reducing her hard work to slave labour. Lenders in this village charge exorbitant rates, making people who begin borrowing with them even poorer (Joshee, 2008). Conventional banks were not an option as the villagers were illiterate, had no bank account, credit history and had no collateral. Soon after meeting this woman, Yunus returned and gave interest-free loans to the 42 people in similar situations in the village which was repaid within a week (Yunus *et al.*, 2010).

This was the beginning of the Grameen Bank, which now lends to 8.3 million people, who use microloans to lift themselves out of poverty. Re-payment rates are high, around 95-98.4 percent, enabling it to be profitable since its inception, albeit for three years of its four decade journey (Joshee, 2008; Yunus, 2012; Yunus *et al.*, 2010). To ensure borrowers meet their commitments, local branch managers visit villages and sign up clients in groups of five. Money can only be lent to the group once the first two borrowers in each group have begun to pay the initial amount and interest off within a six-week window (Yunus *et al.*, 2010). Grameen uses this to get around the requirements by conventional banks: “group support, peer pressure, self-interest and the motivation of borrowers ensure that repayment rates on Grameen Bank loans remain high” (Yunus *et al.*, 2010: 314).

Also contrary to conventional banks, Grameen Bank primarily lends to women (97 percent of lenders are female). Specifically, small, interest bearing loans are provided to clients who use the money for activities such as “rice-husking, machine repairing, purchasing rickshaws, buying milk cows, goats, cloth, pottery and so on” (Yunus *et al.*, 2010: 314). Yunus (2012) believes that every human being is an entrepreneur, as they have the creativity and skills to solve problems, a sentiment echoed by Swilling *et al.* (2011: 2) who recognise “the immense creative energies of informal settlers” as “a key facet to their survival”. Sometimes clients are nervous to take out loans because “society has totally demolished her confidence in herself [referring to the poor] ... They say ‘you’re wrong, you’re no-good, you’re good-for-nothing’ and generation after generation they have heard it, that’s what they believe in. So we wanted to change that – build confidence in them” (Yunus, 2012).

4.1.3 Enterprise Facilitation

In 1970’s Ernesto Sirolli worked for an Italian non-governmental organisation (NGO) doing work in Africa, and witnessed his and other well-intentioned NGOs fail, time and again, to set up successful projects: “I thought, age 21, that we Italians were good

people and we were doing good work in Africa. Instead, everything we touched, we killed” (Matshe, 2013; Sirolli, 2012). In his TED talk, Sirolli gives an example of a failed project: “we Italians decided to teach Zambian people how to grow food... and of course the local people had absolutely no interest in doing that, so we pay them to come and work, and sometimes they would show up. And we were amazed that the local people, in such a fertile valley, would not have any agriculture... But instead of asking them how come they were not growing anything, we simply said ‘thank god we’re here!’” (Sirolli, 2012). Once the crop, tomatoes in this case, was ready to be harvested, a herd of hippopotami came out of the river, and ate everything. When the NGO asked the local community why they didn’t give warning against planting in the valley, the locals response was simply that they had not been asked. In his view, the failure of NGOs was primarily due to the arrogance with which they operated: “we western people are imperialists, colonialists and missionaries. And there are only two ways we deal with people, we either patronise them, or we are paternalistic” (Matshe, 2013; Sirolli, 2012).

Learning from these experiences, Sirolli developed a different, person-centred approach that is now called Enterprise Facilitation. In essence, facilitators spend time in local communities, having informal engagements and becoming friends with the locals, and trying to find out what peoples’ passions are, what they want to do (related to small businesses), and what skills they have (Matshe, 2013; Sirolli, 1999). Facilitators then offer to assist local and potential small enterprises wherever required, be it finding partners with different skills, or assisting to secure finance. Through Enterprise Facilitation “you never initiate anything, you never motivate anybody, but you become a servant of the local passion, a servant of local people who have a dream to become a better person. So, what you do: you shut up, you never arrive in a community with any ideas, and you sit with the local people” (Sirolli, 2012). Facilitators therefore need to be good, non-authoritative, non-intrusive listeners, and need to hand over control and power to the ‘client’ for whom they should support passively (Sirolli, 1999). Facilitators work one-on-one with locals, and offer complete confidentiality, dedication to gain trust.

An example of Sirolli’s work is Esperance, an isolated rural community with a population of 8,500 people in West Australia. At the time, in 1985, the fishing industry was in a recession after years of unrestricted catching, the fishing fleet had gone from 45 to 7 boats, and unemployment and debt were high, and the farmers and fishermen were struggling. Similar to perceptions of the poor in South Africa, some of the locals in Esperance felt that the unemployed were “too lazy and too well looked after by the government to be willing to work” (Sirolli, 1999: 31). After five days spending time with the local people, local organisations and attending community meetings, he came across a Mauri who, after being retrenched from a food-processing plant, had built a smoking kiln in his garage and had been struggling to set up a fish smoking business.

The Mauri's produce has been confiscated due to non-compliance with health regulations, and he could not get funding to move the oven to an approved building. After making absolutely sure that he was passionate about smoked fish, Sirolli decided to assist him during the one month contract he had been granted by the Regional Minister to work in Esperance. A loan was secured for the Mauri that enabled an industrial property to be rented, health requirements to be met, and the home-built kiln to be relocated. The success of the smoked fish attracted the attention of tuna fishermen from a fragmented industry. Sirolli took them on as clients and, after three months, helped the unmanageable fishermen become an organised unit that was more appealing to funders. Their combined efforts allowed them to pool and attract finance for market research, ultimately leading to them selling fish to Japan at \$15/kg compared to the \$0.60/kg they received at the local cannery. As his work continued, Sirolli gained more publicity, trust and clients and trained additional facilitators to support him. Since then, his team has supported over 300 communities and 40,000 businesses across the world (Sirolli, 2012).

4.1.4 iShack model

Enkanini is an illegal informal settlement (slum) located in Stellenbosch. Residents most commonly live in shacks (informal dwellings) made of materials such as corrugated iron, pallet wood, cardboard etc. and use paraffin, kerosene or candles as energy sources. The inadequate insulation and poor security offered by the housing structures combined with the use of energy sources that are a major fire risk, and that release harmful fumes and moisture result in a dangerous living environment for slum dwellers. Many South Africans in these types of situations have a similar response: wait till government arrives and delivers on their promises. For those at the bottom of government's list, this constitutes a 35-year waiting period (Keller, 2013; Swilling, 2014). When government does arrive, the existing infrastructure is demolished, and new homes are built from the ground up, and services provided thereafter (Keller, 2013).

Motivated by the challenge of improving living conditions for the poor, a group of action-orientated research students from the Sustainability Institute sought to find an answer to the research question: "what could be done between now and the arrival of the [national infrastructure] to improve quality of life?" (Swilling, 2014: 5). Due to the nature of the problem, interventions needed to be affordable, scalable, and upon their eventual conclusion, needed to be able to work alongside government services (i.e. not become redundant) (Keller, 2013). In order to be allowed to work in and with the community and understand the community needs in more depth, trust and "direct relationships needed to be established with the community, which included students moving into the community to experience living in a shack" (Swilling, 2014: 5). This meant that researchers engaged with residents regularly through informal conversations and households visits, initially aided by a church leader (Swilling *et al.*, 2013).

Once an understanding of the problem had been ascertained, three homes were identified for a pilot project for the researchers' intervention. The transdisciplinary researchers focused on two elements: reducing the thermal fluctuations in the shack using ecological design principals, and providing a safe energy option. The low-cost green building techniques used included the insulating of ceilings and walls with recycled cardboard (painted with fire-retardant), the addition of thermal mass by using reclaimed bricks for the floor, the shack was orientated north-ward, a roof overhang was provided, and windows were added in strategic locations (Swilling, 2014). Finally, an off-grid, solar-home-system was added which included a PV panel, LED lights and a cell phone charger (Swilling, 2014). The result was an additional 4 to 6 hours of thermal comfort daily, reduced fire risk and improved light in the shack (Swilling, 2014).

After implementation of the intervention, close attention was paid to user feedback including what residents found most useful and what (and how much) they were willing to pay for (Swilling *et al.*, 2013). It was found that demand was greatest for solar home systems, possibly due to the national electricity shortages taking place at the time, as well as the settlement being illegal (making the installation of grid electricity in this settlement unlikely). Other causes for the solar system being most popular was the addition of a DC television and outside security light to the configuration, which despite time spent in the community, may have seemed insignificant to researchers (primarily from backgrounds of privilege). Therefore, understanding the importance of these additions to residents could have only been figured out through multiple iterations, as well as continuous and close community engagement. With this in mind, researchers narrowed the focus of the iShack project, and created a social enterprise to support the roll out of solar multigrid systems at scale in the community. In addition to providing safe energy that could work in conjunction with the national grid, and additional appliances (such as a fridge) could be added to the system as the user's disposable income increased. Unlike state interventions, this allowed for "step by step improvements over time" (Keller, 2013).

In addition to the physical setup, selected residents from the community were trained to be micro-entrepreneurs and had to fulfil tasks including marketing, installing and maintaining the systems. A payment system was set up, and incorporated local businesses to make payment easy for users (the solar system could be remotely disabled in the case of non-payment). New customers were signed up in groups to reduce the risk of non-payment. The result of this complex technical system being continuously adjusted, with multiple actors, to meet the needs of an even more complex community was that installations grew from 20 pilot customers in 2011, to almost 1,000 regular users in 2017, a significant number given that operating at this scale allows the social enterprise to be financially self-sustainable. Aside from the health, ecological and cost benefits, other benefits realised from this initiative were children being able to study at night, improved safety due to the perimeter light, and fully charged cell phones leading to residents being able to take on additional work.

4.1.5 Londolozi

Londolozi is an ecotourism lodge located in northern South Africa. Initially farmland, the huge area was purchased in 1926 and two generations later inherited by two young white South African teenagers. By then, the land was barren, and topsoil degraded due to overgrazing, which meant that the indigenous Shangaan tribe that lived in the area “scratched out a harsh existence by foraging, growing struggling crops of maize, and hunting the few small wild animals that still lived in the brush” (Groch, Gerdes, Segal & Groch, 2012: 155). Having observed this, the brothers decided to begin land restoration efforts in 1971.

The combination of growing up during a time of increased awareness around ecological sustainability combined with a childhood lived among the indigenous people in the African bush allowed the brothers to have constant interaction with locals, learn the indigenous language (Tsonga), and learn traditional skills. Through this understanding of the land and people, they understood how deeply intertwined the business was with the local ecosystem, and began their restoration efforts by consulting with a geologist, and the local tribe to restore the water table by restoring natural drainage systems (Butterfield & Abye, 2013). Since then, the lodge has regularly invested in the restoration and preservation of the natural ecosystem. This includes replanting of trees and shrubs, river restoration, micro-catchment management, ecologically designed buildings, solar photovoltaic electricity generation, and a shift from diesel to electric off-road vehicles.

Also understanding the interconnections with the local community, Londolozi integrates and supports the local community in various ways (Butterfield & Abye, 2013; Londolozi, 2017). The provision of jobs is one way of supporting individuals from the indigenous community who, for example, are employed as trackers (which also allows for the preservation of indigenous skills). Inputs for the business are purchased from small business in the local community that make or grow jewellery, crafts, toilet paper and vegetables. The local community also provides a cultural tour experience for tourists by cooking for them and allowing them into their communities (Londolozi, 2017). The business invests profits from the business into education and healthcare (including full time staff) for the local community, understanding that improved wellbeing and home circumstances improve client engagement, thus benefitting the business (Butterfield & Abye, 2013).

Throughout the running of the ecotourism lodge, the management of the family-owned lodge consulted with tribal leaders and villagers. Their engagement process what Groch *et al.* (2012: 158) describe as a core part of the lodge’s success:

“Most important is that all interventions in the Londolozi Model are based on a factor absent from many well-intentioned development efforts: empathy. More specifically, the model is rich in what we call *social empathy*. Social

empathy stresses contextual understanding and social responsibility, built on a foundation of individual empathy (Segal, 2011). Instead of imposing aid on local people, from its inception Londolozzi has maintained long term relationships between White and Black Africans, with *deep listening* and abundant communication continuously adjusting the model to better accommodate local cultural needs.”

The Lodolozzi model has proved successful in creating ecologically sustainable and socially inclusive economies, and has subsequently been replicated elsewhere in Africa. The business takes a long-term view and makes a meaningful effort in its restoring and protecting of local natural ecosystems. Their inclusion of the local community and engagement process demonstrates trust and respect between South Africans of different races, much needed in a country where the poor faced with deep racial segregation and tension, and a country in which there are great levels of hopelessness. Finally, the lodge also demonstrates the peaceful transfer of wealth from the affluent to those materially poor, necessary given the vast economic inequality in the country.

Questions can, of course, be asked about these case studies which are unlikely to be without very serious flaws. For example, questions can be asked around whether microfinance is indeed effective, and whether it would be transferrable to South Africa, where habits around using debt may differ. Furthermore, the influence of the facilitator or development agent seems to continue to be strong in many of the cases, raising a question around the dependency of communities on the facilitator. In the case of the iShack project, serious questions can be asked about the neglect of social organisation in favour of a more market approach – a problem that has been recognised subsequently by the iShack social enterprise resulting in a different more social strategy in other communities where they operate. These questions are important, but beyond the scope of the study and could be reviewed in future research investigations. The cases were provided to illustrate ways in which the three principles may practically be incorporated into community development projects.

4.2 Principles of Meaningful Development

Emerging from these examples, are important lessons that IPPs can incorporate into their development practices. These can broadly be grouped into three categories. The first is around the importance of the development approach or social process taken or the extent to which community development workers take time to understand the local context, and form relationships with the locals. This becomes the foundation upon which initiatives are co-created. The second element that should be considered is to what extent an enterprise mindset has been taken in creating community projects, and the extent to which they are financially viable in the long term. The third element is the level to which ecological sustainability is incorporated to reduce long-run adverse impacts of community projects.

4.2.1 Engagement Approach

Every community has unique opportunities and challenges, and these can only be discovered through deeply engaged immersion in the local context. Development practitioners therefore need to take the time gain some understanding of the community in terms of its history, culture and social dynamics, and build trust and relationships with the local network. An experienced CSR manager from the mining sector explained the importance of first gaining approval of community authorities before any engagement with the community, and gaining the trust of residents through the continual delivery of promises and absolute transparency (Anonymous, 2016ai). In one case in the Eastern Cape, the individual accompanying researchers to project communities had to get approval from the community leader before taking researchers to see the community crèche. Groch et al. (2012: 73) refer to this as ‘deep domain knowledge’: “an intimate, holistic understanding of the entire local situation, from geological factors to political history to the language and customs of the local people”.

Compassion and understanding of the local practices and mentality also can only result from time invested in local communities. For example, looking from the outside-in, shack dwellers living in their informal dwellings for decades without making improvements to their living conditions may seem to be lacking in proactivity, or lazy. Once there is some understanding of the local context, decisions of the poor become completely logical: why would any individual invest in upgrades to their homes when it will be knocked down upon government’s eventual arrival who would provide free housing, electricity, water, sewerage etc. (Keller, 2012, 2013; Swilling *et al.*, 2013)?

When working in low-income communities, the best practice cases demonstrated respect, non-judgement and social empathy about the capabilities of the locals. Sirolli (2012) recommends that development practitioners put their ideas aside and simply “shut up, and listen” to identify what people are most motivated and passionate about. This approach, takes an asset-model approach that focusses what exists in the community, as opposed to the deficits (Owen & Kemp, 2012). This allows for the “unlocking human energy and potential” which emerged as a necessary condition for development in a workshop that took place at the Sustainability Institute with eight experts working in various spheres of community development in Africa (Anonymous, 2016aj). “Individuals are validated in their humanity, not as a mere beneficiary” with a potentially liberating effect from past conditions and structures that “lock us into labels and limit human potential” (Anonymous, 2016aj). The development agents in the best practice examples were continually engaged, with some even living in the community, dramatically different when compared to some IPPs spending a few hours in the community a handful of times per year.

The top-down approach, common among corporations in general, focuses on what is missing in the community and reducing public relations risk, an example of a

deficiency-model (Owen & Kemp, 2012). Such an approach inevitably results in “a sense of disempowerment arising from meaningless, tokenistic, or manipulated participation; the use of new skills and alliances for corrupt or questionable ends; and elite capture of the participatory process” (Gaventa, 2013). Maintaining the vastly separated roles between the ‘all-knowing developer’ and ‘incompetent recipient’ demonstrating “an arrogance that undermines the humility needed to effectively engage the complex power dynamics that saturate [informal settlement communities]” (Swilling, 2014: 6).

In the context of South Africa that has a history of power inequalities and where a patronising and paternalistic approach by government is commonplace, the acknowledgement of value existing in the community by corporations is empowering (and likely uncomfortable) for communities. This creates an environment in which compassion and mutual respect exist; conducive to learning through dialogue, and co-creation (Owen & Kemp, 2012; The 4th Barefoot Guide Writer’s Collective, 2015). Making community members an integral part of the creation process not only ensures short feedback loops so that efforts are aligned to the most pressing needs, but also demonstrates respect, and helps locals regain belief in their own capabilities. Rotary International (2016) share their experience: “proactive community involvement facilitates accountability, ownership, and clear expectations resulting in long-lasting impact”. In each of the best practice case studies, a depth of understanding of local problems led them to a solution that was created with the community it was aimed to help, and each underwent several iterations to get to a point of mass rollout.

This requires significant passion, dedication, immense creativity and problem-solving abilities on the part of the development practitioner. In the case of the iShack, to get to the point of success, the project faced countless legal, community, municipal, technical, political and other challenges but overcame these with substantial amounts of time and energy invested to creating a robust solution. Commitment is required from practitioners to overcome such continual hurdles, and to be available when community residence are available, i.e. after working hours or weekends, and need to be available to deal with emergencies (Anonymous, 2016ai). Patience, continuous engagement and presence of students was required to gain trust in the community, deflate misconceptions about solar systems and to support the community overcome fears of receiving a lower priority from by Eskom grid electricity. Challenges included, some of which persist, users tampering with the system, faulty batteries (adding to financial pressures), poor work ethic and high turnover rates and of the micro-entrepreneurs, community strikes, and the project still being dependent on external (albeit passionate) coordinators.

These ongoing, complex and unforeseeable challenges clearly demonstrate that any interventions cannot simply be a handout of technical devices. Poverty is complex, and addressing it, or segments thereof, requires a strong understanding of intangible factors (e.g. psychological, social, cultural, historical). “Context appropriate design of

complex technical systems resulting from ‘the mess’ [referring to the multiple, difficult to understand, interconnected layers]” is therefore a necessary condition for success (Anonymous, 2016aj). Multiple iterations are then required to make the technical system fit within the socio-economic context, a processes Yunus (2010) refers to as “undertaking experimentation”. Figuring out, for example, that signing up clients (for solar home systems or micro loans) in groups yield greater repayment rates than signing up individuals, and configuring of the risks and responsibilities of these groups, takes time and continual adjustment to discover and make work in a particular context.

Focussing on women, is another example of a strategy that emerged through continuous engagement and multiple iterations, or what Yunus (2010) terms “challenging conventional wisdom”. Gates (2016) explains why this works through learnings from their Foundation’s work: “evidence shows that when women control money, they are more likely than men to spend it on priorities that help fight poverty, like education, health, and nutrition. When a woman controls the family’s income, her children are 20 percent more likely to live past the age of 5. Behind that abstract percentage stand millions of women who sacrifice to make sure their families have what they need ... to give their children a chance at a better life than they had” (Gates, 2016).

Swilling (2014: 5) explains what emerged from restoring some level of self-belief within the slum community through working with, and forming support small groups in, the community: “what started off largely as a rather limited technical intervention spiralled out into a wider community mobilisation process”. Keller (2013) describes why this is important: “by being organised slum dwellers become far more powerful. They’re able to share resources, co-ordinate their efforts, but more importantly are more effective in engaging with government in order to receive the support and subsidies which are due to them”. “People who are aware of their right to participate and are more confident of their ability to do so. It also helps hone civic skills so that people become more aware and more effective citizens” (Gaventa, 2013). When relaying personal experiences around the question ‘what can be seen when development has happened’ the development experts found that there is a “strengthening of social fabric” and a community-wide unlocking of human potential resulting in “radically different imagination of the future of a place and its people” in the community (Anonymous, 2016aj). In addition to being able to dream again, “active citizenry is realised through an inclusive and contextualized sense of belonging” and through effective organisations (Anonymous, 2016aj). Further contributing to mobilising of communities is strengthened networks and trust and “more inclusive systems resulting from new relationships of power” (Anonymous, 2016aj).

Appropriate partnerships need to be created to support development initiatives, and they need to be involved in any processes from inception (Anonymous, 2016ai;

Yunus *et al.*, 2010). In the REIPPPP project community areas, few organisations exist other than the local government, who are often neglected as an important partner. Ironically, when their ED efforts caused intense disagreements with communities, IPPs would turn to local municipalities. The role of local and national government cannot be discounted, as government needs to be active and respond to the demands of communities. For development practitioners, working closely with government actors is imperative as participation works best as a ‘sandwich’ with both bottom-up participation supported by top-down supervision (Mansuri & Rao, 2013; Mark Tran, 2012). In the case of the iShack, the municipality was approached and negotiated with for the free basic electricity subsidy (allocated to individuals whose consumption falls below a certain threshold) to be paid to the iShack project, supporting the financial feasibility of the initiative. Sirolli (1999) is a firm believer that nobody can create successful enterprises alone, and he practices what he preaches: he approached governments to fund his time in communities, state organisations to provide loans and grants to the entrepreneurs he assisted, and always tapped into the local networks to support business expansion.

For poor, rural communities in South Africa with limited infrastructure and internal capacity, creating an enterprise to solve social problems is not realistic such as in the case of child and adult care. Nonetheless, community development practice can learn much from an adopting an enterprise mentality.

4.2.2 Enterprise Thinking

Entrepreneurship is oft cited as one of the primary drivers of economic growth, job creation, competitiveness, innovation, and as having multiplier effects which can act as “a catalyst for improving overall community wellbeing” (Fortunato & Alter, 2015: 446; Hammond, Kramer, Katz, Tran & Walker, 2008; Vorley & Williams, 2015). Fortunato and Alter (Fortunato & Alter, 2015: 451–452), articulating Lyons’ view, state that “entrepreneurship, if it is equitable and inclusive in its intent, has the revolutionary potential to build upon local assets, culture, imagination, and skills in ways that other strategies cannot”. The importance of small businesses is acknowledged by the South African government’s development strategies as well the creation of support organisation such as SEDA (Small Enterprise Development Association), SEFA (Small Enterprise Finance Organisation) and similar (Department of Economic Development, 2011; National Planning Commission, 2011). The Department of Energy’s IPP Office also recognises the importance of micro, small and medium enterprises, as seen by enterprise development forming a part of the mandatory community development spend.

In recent years, alternate forms of entrepreneurs have also emerged that, in addition to a financial profit focus, place the provision of societal and ecological benefits at the very core of the business (Carelse & Methvin, n.d.; Hammond, Kramer, Katz, Tran & Walker, 2007). These entrepreneurs take a market-based approach to solving community ills, such as providing affordable services to the underserved (such as in

the best practice cases), are known as social (Barendsen & Gardner, 2004; Martin & Osberg, 2007; Seelos & Mair, 2005), community (Fortunato & Alter, 2015; Munoz *et al.*, 2015; Nwankwo *et al.*, 2007; Vorley & Williams, 2015), sustainability-driven (Parrish, 2010), or high-impact entrepreneurs. Trägårdh (2008: 1) refers to these individuals as ‘trespassing’ entrepreneurs who are “constantly crossing the border between the economic sphere of business development and the social sphere of community development, thus activating themselves in private, public and civic organisations”.

Unfortunately, South Africa’s entrepreneurship ecosystem (training, mentorship, government support, access to funding etc.) remains weak, especially in rural and low-income areas, which is a contributor to the low employment and low rate of entrepreneurship in the country compared to other African and developing nations (Singer, Amorós & Moska, 2015: 32). This can, in part, be explained by entrenched apathy and poor self-belief that exists among poor communities due to decades of conditioning. Fortunato (2015) refers to this state of low motivation where citizens have given up searching for work and attaining skills as a ‘culture of poverty’. This results in what Uche (2010) describes as ‘Poverty of Knowledge’ or ‘Mental Poverty’ that is “one of the major thorny issues affecting business in Africa”. The results of this, according to Uche (2010: 93) are “barrenness of business idea(s)” and “lack of creative innovations needed for exploring and engaging in profitable economic venture”. Worst affected are the poor and especially the illiterate who are “devoid of the basic knowledge of the principles of business practice as defined by the principles of free enterprise” (Uche, 2010: 93). Therefore, efforts that create economic opportunity for the poor and reduce mental poverty are important, and in great demand in communities.

In the context of poor and rural areas of South Africa, such as the IPP communities in the Northern Cape where levels of motivation are low and local capacity is severely lacking, establishing entrepreneurship ecosystems is challenging. Fortunato (2015) summarises the unique challenges faced by rural entrepreneurs: “the remoteness and isolation of rural areas is synonymous with their rurality, but it also isolates rural entrepreneurs from dense customer and supplier markets, business services, and access to information diversity afforded by urban areas. Put differently, rural areas lack the entrepreneurial momentum”. The creation and supporting of enterprises will be difficult, but especially in South Africa’s low-income communities, much needs to be learnt from an enterprise mentality. Trägårdh (2008: 1) identifies an entrepreneurial mindset as being crucial to the creation of businesses: “enterprise and entrepreneurship is about entrepreneurial attitudes and skills, i.e. innovating to create change and opportunity, in whatever sphere of life”.

When considering that the need in communities is vast, and resources are limited, efficient allocation of those resources is important. An enterprising mindset requires adopting a demand-driven approach, for example by considering the willingness of

'customers' to pay, could provide a good indication of what which is most needed (Gunatilake, Yang, Pattanayak & Choe, 2007; Lamsal, Atreya, Pant & Kumar, 2015; Ries, 2017; Wellard et al., 2013). Being customer centric and adopting a 'lean start-up' methodology approach (that advocates for starting small and continuous iterations) can also ensure that solutions are co-created with beneficiaries specifically to meet their needs through an iterative process to minimise wasted resources (Lyons, 2015; Ries, 2017; Wellard et al., 2013). This process follows the guidelines of effective social work, and therefore should be empowering because communities knows their needs have been closely listened to, and that they have been intimately involved in the solution.

Probably the most important reason for fostering an entrepreneurial ecosystem is the mindset it encourages. An enterprising mentality is one that is passionate, proactive, creative, resolute and optimistic (Moscardo, 2014). Sirolli (2012), recognises passion for what they do in an entrepreneur as crucial, and Trägårdh (2008: 8) found a common characteristic among 'trespassing entrepreneurs' was their strong "ability to communicate accurate and promising images of the future of the community" and that "they seem to contribute to a positive change of the community image". Such a mentality allows for the viewing of difficulties as challenges to be solved instead of insurmountable obstacles, and encourages individuals to take control over their destinies and situations, instead of allowing life to happen to them. The motivating factor for communities may be that "local people find relevance in contributing to the good and progress of not only their own immediate communities but to the larger society as a whole" (Kolawole & Ajila, 2015: 131).

As is understood by Kolawole & Ajila (2015: 132), this type of thinking is desperately needed in IPP communities: "The realisation of meaningful economic growth and development suggests that rural people's potentials for entrepreneurship need to be unlocked in order to lift them out of poverty". Lyons (2015: 456) further describes how this type of thinking can be valuable, especially in a context where motivation is lacking:

"I have long been an advocate of entrepreneurship as a mindset, process, skill set, and tool kit that can help us solve the economic, environmental, and social challenges that our communities face. I believe in the power of the passion, determination, and resiliency displayed by entrepreneurs. I embrace the concept of using markets to accomplish social good ... I accept as true that we all can benefit from the entrepreneur's restless and creative search for opportunities to add value to the lives of others and the innovation that brings new ideas to their intended markets (Drucker, 1985; Schumpeter, 1991). I believe that entrepreneurship in pursuit of community development matters."

Vorley and Williams (2015: 560–561) also speak about the importance of such a mindset:

“The phenomenon of entrepreneurship is largely a phenomenon of the mind, concerning alertness to opportunity, perception, and imagination (Kirzner, 1973; Sautet & Kirzner, 2006; Yu, 2001)” ... “‘enterprise capability,’ defined as the capability to handle uncertainty and respond positively to change, to create and implement new ideas and new ways of doing things, to make reasonable risk/reward assessments and act upon them in one’s personal and working life.”

At their very core, businesses are designed to take a market-based approach to solving problems. In a world of infinite need and scarce resources, interventions need to target the most pressing issues in society. Assessing the willingness to pay in communities, or taking a demand-driven approach, for various interventions is a useful way of identifying most pressing needs, and establishing the financial feasibility of projects (Gunatilake, Yang, Pattanayak & Choe, 2007; Hammond *et al.*, 2007; Lamsal, Atreya, Pant & Kumar, 2015; Ries, 2017; Wellard *et al.*, 2013). For example, the researchers involved in the Enkanini community with the iShack were initially involved broadly throughout the community in sustainability-focussed projects. This included thermal improvements to informal homes, biogas digesters, food gardens, waste recycling and the solar-home-system installations. By understanding what users were willing to pay for and through close engagement with the community, it was decided that the solar system would become the focus of the iShack, on a fee-for-service model.

This can be compared to a solar-home-system project in the Northern Cape run by an IPP in which users received the system at no cost. During a follow up site visit, it was found that users had little understanding about, and minimal interest in solar electricity (Anonymous, 2016b). Furthermore, solar systems were found abandoned because users did not know how to use them and because of the lacking maintenance service accompanying the system.

To avoid such situations, development practitioners need to be thinking about the longevity or continuity of projects from the initial stages of their involvement. Freek acknowledges that practitioners “get to leave” and should do so having left behind some sort of lasting positive impact (Freel in The 4th Barefoot Guide Writer’s Collective, 2015: 85). An experienced CSR representative of a Northern Cape mining branch, is mindful of creating dependencies and upsetting communities. This individual therefore ensures that each project had an ‘exit strategy’ so that, as the mining representative, he could phase himself out of the project such that it was able to continue without him (Anonymous, 2016ai). Aside from effective community development processes, community initiatives can be made more resilient by adopting enterprise approaches to development.

One way of doing this is using a hybrid fee-for-service model, as done by the iShack project. This does not imply an intention to generate financial surplus for shareholders, but rather to use income gained from grants, local government (through the free-basic-electricity subsidy) and users are used to support the cost of operations, maintenance and broadening the project's reach. More important than financial resilience, the user-pays business model, where the recipient must buy-in or at least make some contribution, makes it more likely for the product to be well utilised (Gourville & Soman, 2002). Furthermore, the fee-for-service model is an opportunity for the poor to take on a small financial responsibility which forms an important part of breaking down a recipient mentality, and building up a mindset of confidence and self-help (Anonymous, 2016a; Yunus, 2012).

From the supply side, establishing transparent incentives linked to financial reward is also important for the continuation of projects (Hamann, 2004; Wellard *et al.*, 2013). As has been illustrated, IPPs and ED officials have little incentive to see projects succeeding, as their revenue/ salaries are not dependent on whether their initiatives result in positive community change. In contrast, social or community entrepreneurs have their incomes dependent on, or at least linked to, the success of the community project and therefore the reach of its impacts, and the efficient use of resources (Barendsen & Gardner, 2004). It is therefore within their interest to see their initiatives thrive.

This also means that it is in the interest of social entrepreneurs to engage in meaningful development practices, such as maintaining close relationships with the community to adapt their offering per community input. A product or service that the community is not interested in needs to be removed or readapted quickly. Trägårdh (2008: 8) further elaborates on the importance of relationships: "it seems easier for people in rural areas to be aware of the connections between business and community and to simultaneously act on different arenas. The know-who of business people and local government is usually smaller in peripheral than in big city areas – the communities are simply small enough to make it possible for influential people to get to know each other, also on a more personal level". Community and culture are also important forces: "much of the power of community entrepreneurship development stems from its ability to build wealth from cultural assets that are unique to the community. The role of culture is not only a building block, but can also fundamentally inspire or inhibit" (Fortunato & Alter, 2015: 452).

There are a multiplicity of ways to combine an enterprising approach with community development and wellbeing. This can range from local entrepreneurs fitting solar systems in communities, to raising livestock to sell outside the community. "Entrepreneurship and community development are messy, complex topics" and "there is no "one right way" to do entrepreneurship development, no magic bullet or panacea. There are, however, a multitude of effective approaches that can work in a variety of different local and regional contexts, and for a multitude of reasons"

(Fortunato & Alter, 2015: 453). The acknowledgement that ‘entrepreneurship development’ can fit a broad number of contexts and situations is relevant in the REIPPPP, given the differing social challenges and mentalities in each beneficiary community.

Kolawole & Ajila (2015: 131–132) sum up why entrepreneurship development, or participatory rural entrepreneurship is important within local community development:

“Indeed, entrepreneurship development and employment generation provide a vital platform for enhancing rural livelihoods. Sustainable rural development is thus achieved where and when unemployment and poverty situations are alleviated through context-specific and ecologically sound community level initiatives ... context-specific and ecologically viable initiatives will play a significant role in enhancing sustainable entrepreneurship development and employment promotion, particularly so in the south countries.”

Therefore, to be truly impactful and progressive, in addition to focussing on meaningful development processes and an enterprising mentality, community development efforts in the REIPPPP should be aligned with principles of ecological sustainability.

4.2.3 Sustainable Development

There is a fundamental lack of awareness around ecological impacts in development efforts seen in the REIPPPP. This is both a challenge and opportunity for rural communities in South Africa. Having not progressed too far down the Western path of development, and having little infrastructure, creates an opportunity to learn from the mistakes of the developed world. At present, the development trajectory in South Africa, despite government oft citing ‘sustainable development’, uncritically follows a conventional development-as-modernisation and economic growth trajectory that is generally environmentally insensitive and structured to benefit a small part of society (Behrens, Giljum, Kovanda & Niza, 2007; Harris, 2000; Peet & Hartwick, 2009; Pieterse, 2001; Swilling & Annecke, 2012). Continuing along such a development path can be dangerous because it accepts that some get trapped in poverty, and ignores the reasons as to why (Du Toit, 2004).

An alternative that could be pursued is a truly sustainable trajectory that is socially inclusive and empowering, has low ecological impact, and is grounded in self-sufficiency and simplicity. Also referred to as sustainable development, or postdevelopment, this path is based on creating balance between the economy, planet and society. This means that in all human activities, attention should be paid to all three elements whereby economic activities (such as the production and trading of goods and services) should be conducted in a way that ensures a continuous resource

base and maintains ecosystem functions, and does so in a way that is socially empowering and achieves distributional equality (Harris, 2000, 2003; International Institute for Environment and Development (IIED), 1992; Reed, 2013; Swilling & Annecke, 2012).

Practically, such thinking should filter down even to community-level projects, and each initiative should take a multidimensional view and consider these factors along the lifecycle of projects throughout the project. For example, some of the questions that development practitioners could ask themselves about any development projects include: how will it continue once funding from the plan is depleted? What proportion of the inputs used are sourced locally? What are the impacts on the environment (throughout the lifecycle of the initiative, and the inputs required for the initiative)? What are the social implications in terms of the labour requirement, and wellbeing? Are there metrics that can be used to prove a positive impact? Would the community be able to maintain the project in the absence of the development team?

For example, the iShack makes use of photovoltaic solar panels and highly efficient appliances through a user-pays system that allows financial surplus to be reinvested into the community. The result is a low ecological impact solution, installed by individuals from the community, that empowers and measurably improves the lives of users of the iShack and the broader community. In contrast, conventional development thinking would likely simply connect slum settlements to the coal-powered national grid, that would most likely have been done in a non-participatory way using contractors from outside the community.

The Londolozi model is another example of an enterprise approach that makes a significant effort to incorporate and empower the surrounding traditional community in meaningful ways, while taking steps to remain within the ecological bounds of the planet. The owners take a long-term view in managing the land, and understand that environmental stewardship is crucial to sustain the local communities and the diverse native flora, thereby maintaining their business' ability to generate financial income.

4.3 Potential in the Northern Cape

There is evidence of such social enterprise approaches having emerged, mostly farming focused, in the Northern Cape. Most have these are primarily focused on reducing social ills, and less around ecological stewardship (though this could be incorporated). Eksteenskuil Agricultural Cooperative (<http://www.eksteenskuil.co.za/>), for example, is made up of around 32 emerging grape farmers from previously disadvantaged communities (Anonymous, 2016a; National Agricultural Marketing Council (NAMC), 2016: 9; Traidcraft, n.d.). The Cooperative was established in 2006 with the primary aim being to support the wealth creation of its members, and does so by providing inputs, training, infrastructure and shared farming implements as well as managing off-take agreements, leveraging its

Fairtrade status to attain a premium price for its raisins on the export market (Anonymous, 2016ak; Traidcraft, n.d.).

A livestock lending programme was also initiated in the Northern Cape, known as the Kalahari Kid Corporation (<http://www.kalaharikid.co.za/>). This organisation assisted rural smallholder livestock farmers through the lending of indigenous sheep and goats, as well as training, funding, registration and land acquisition facilitation support for farmers. The Corporation would then also process and sell livestock for the farmers while maintaining quality standards. Despite being useful to farmers, the programme had limited success due to poor administration (Anonymous, 2016j, a, l,o). Through these, and similar government-initiated programmes, several 'opkomende' or emerging farmers have managed to establish themselves and now thrive independent of additional support, albeit at different scales (Anonymous, 2016j,a; NAMC 2016).

These examples highlight initiatives that combine enterprise-focused initiatives that were designed to have high, long-lasting social impact. There is great potential to further incorporate meaningful sustainability throughout these low-income, underdeveloped regions, even when incorporating elements of enterprise is more difficult, such as in schools, old age homes and crèches. For example, in the Northern Cape, the poor are subjected to extreme temperatures due to this being a semi-arid region. To remedy this at several schools, IPPs took a quick-fix approach and installed air-conditioning systems. These are expensive to install, maintain, regas and repair, especially because this would need to be done from a technician from outside the community. An ecological alternative would be to use low-tech active and passive heating and cooling, as was done with the initial iShack. For example, this approach could make use of grapevines for shading in summer, correctly orientated windows, overhangs, insulation etc. Such interventions could be, with the necessary guidance, completed and maintained with local materials, at low cost, and by community members.

In another area in the Northern Cape, the local municipality plans to extend bulk sewerage pipes long distances to small rural communities – a massively expensive operation that uses chemical-intensive purification systems. An alternative would be making use of low-tech, off-grid, biogas digester systems which could be built and maintained by the local community, and would have the added benefit of producing biogas for cooking or heating. These ecologically sound and socially inclusive principles can be applied to almost any context, and need to be incorporated into community development practices if a truly sustainable impact is going to be made.

These approaches empower communities that previously lacked access to opportunities with clear incentives, and a clear relationship between effort and financial reward. This is important as it allows for the breaking down of entrenched power dynamics and associated dependencies between the poor and power holders.

Providing such opportunities also allows for feelings of hopelessness and the recipient mentality to be eroded, as individuals are allowed to take ownership of their situation, thus beginning to build self-belief and independence. For such an approach to succeed, implementing agents need to follow community development principles which incorporate meaningful community development practices, an enterprise mentality and ecological sustainability. These are necessary elements to be integrated into development efforts in the REIPPPP if they are to produce positive impacts in the long-term.

4.4 Conclusion

In Chapter 1 and 2 it is argued that the core failing of corporate community development efforts is a disconnected, hand-out, risk minimising engagement approach which is fundamentally different to the deeply engaged, patient, compassionate approach required by development practitioners. This approach is argued to be problematic because poverty is a deeply ingrained psychological mindset that is difficult to escape. Furthermore, it is argued that development practitioners often fail to adequately prepare ‘exit strategies’ to improve the chances of development efforts continuing after they can no longer be involved in development efforts. Another failing of development efforts is the trajectory taken – if the aim of development efforts is to ensure an economically, socially and ecologically sustainable society, practitioners cannot follow conventional development paths.

Chapter 3 adds to this argument by demonstrating, through real-world case studies, that the hand-out approach does not allow for an understanding of the complex local dynamics, or relationships and trust to be built with local residents, government officials and other relevant parties. The disengaged method of interaction does not acknowledge the sense of hopelessness that is often experienced by low income communities, but instead reinforces existing power-dynamics and dependencies.

The aim of this chapter is to support this research by providing recommendations for development practitioners and development organisations. This is done by identifying and documenting five best practice case studies and extracting the core best practices. There are three core recommendations emerging from this chapter, the first of which suggests that development practitioners follow a deeply immersed and compassionate engagement approach that allows for practitioners to gain an intimate understanding of the local context from the perspective of the beneficiaries. This means taking the time to understand the complexity of each circumstance, allowing actions to be more appropriate. Practitioners should allow communities to drive initiatives and should only play a supporting role to avoid dependency and to avoid becoming the ‘all-knowing expert’.

The second recommendation in this chapter is to incorporate a level of enterprise in development initiatives which, through thinking about creating income streams, can

support longevity of projects. Encouraging the spirit of enterprise, which is innovative and optimistic, could also be empowering as a mentality and raise confidence for communities. The final recommendation is that practitioners should acknowledge that a prosperous human society depends upon ecological systems, from which 'modern' society has become distanced. Rural communities often have yet to 'modernise' and thus opportunity exists to learn from cities and developed countries. Practitioners should therefore incorporate elements of environmental stewardship in development initiatives in order to achieve the aims of sustainable development.

5 Chapter 5 – Conclusion

5.1 Introduction

This thesis aims to gain a better understanding of how effective developmental efforts in the REIPPPP have been thus far. In Chapter 1, the research methodology used in this thesis is described. In the chapter following, CSR practices in the renewable energy sector are compared to those in the mining sector, and both are discovered to be ineffective in similar ways. Theory around the aims of community development, effective community development, psychology of poverty and enterprise development is also documented. The central argument made is that hand-out, disengaged community development practices employed by corporations are ineffective because they pay inadequate attention to the deep psychological challenges that individuals of low economic status commonly have to endure.

In Chapter 3 we see that this argument, derived from literature, is confirmed by observing renewable energy developers in the Northern Cape case studies. These case studies demonstrate that the theory appeared to be correct, and that development agents have difficulty engaging with communities beyond superficial levels. However, this chapter demonstrates that there are significant differences in the outcomes of development initiatives depending on the outlook that development practitioners had and the engagement processes they used. The chapter also gives insight into the complexity of community development in the REIPPPP.

In the next chapter, development efforts in the REIPPPP are compared to best practice case studies, that were deemed highly effective with a view to provide practical recommendations around how developmental efforts could be improved both within and outside of South Africa. The three core recommendations from the best practice case studies are that practitioners should engage with beneficiaries in a way that is respectful, unrushed and not intrusive, in order to build relationships with local stakeholders and to understand the local context. Furthermore, practitioners should incorporate levels of enterprise thinking into projects to best allocate resources and to make the continuity of projects more likely (through considering various income streams). Finally, practitioners should also attempt to align development efforts with the aims of ecologically and socially sustainable development.

5.2 Aims of the Research

The research question:

How effectively do economic development efforts in the REIPPPP make long term improvements in the livelihoods of low income communities?

The core objectives:

- Build an in-depth understanding of the complexity of the REIPPPP from multiple perspectives (systems knowledge).
- Gain a practical understanding of the current economic development initiatives in the REIPPPP, and the impacts thereof to form part of the foundation of this and future research (systems knowledge).
- Explore and document alternative forms of development initiatives that could improve the livelihoods of low income communities (target knowledge).
- Outline best practice principles relevant to community development in the REIPPPP, and more broadly, in South African low-income community contexts (transformation knowledge).

The overall aim of this thesis is to explore how effective development efforts have been at improving the lives of poor communities within the context of the REIPPPP. Through the literature review and case studies, it emerged that current community upliftment efforts take a similar approach as other development agencies have done in the past. These, broadly, are inherently ineffective due to their disengaged nature, addressing only superficial challenges, instead of focusing on the core, psychological difficulties faced by the poor.

5.3 Outline of Main Argument

Through a literature review comparing the well-established mining and emerging renewable energy sector, it is shown that community development or CSR approaches generally take a disengaged, hand-out and patronising approach that often does not end up addressing the needs of the poor. These approaches maintain a culture of dependency of the powerless poor on the authoritative donor, and ignore the psychological issues of hopelessness and lack of confidence that keep the poor trapped in poverty. This style of development practice is prevalent among government institutions, international aid organisations, large corporates, and in South Africa's rural context exists in the mining sector, and is emerging within the renewable energy sector.

In addition, CSR initiatives commonly follow a Western notion of development in which modernisation and conspicuous consumption drive economic growth, which is believed to result in wealth, progress and improved well-being for all. Learning from developed countries, it is clear that such trajectories are commonly beneficial for a few in society, while marginalising others, and are also ecologically destructive.

From these learnings, three elements are highlighted as important when implementing community development initiatives. First is the engagement approach used – when working with communities, development practitioners need to invest significant time, so that they are able to learn about the context and challenges, gain trust, and allow the community to be the drivers of development initiatives. Second is the need for an enterprising mentality that is 'customer' centric to be incorporated (to ensure that

development initiatives closely match the community's most pressing needs) and to put incentives in place so that community upliftment efforts can continue into the long-term without external agents. Finally, if a socially and ecologically sustainable development trajectory is to be followed, developmental initiatives also need to be ecologically sensitive.

In Chapter 3, three case studies in the Northern Cape that capture the different mentalities and attitudes held by different IPPs in the same region are documented. These case studies display the significant variance between engagement approaches taken. For some IPPs, the economic development criteria is simply a box-ticking exercise that is a burden to fulfil, whereas others recognise the importance of this component of the REIPPPP, and make a greater effort to fulfil this mandate as best they can.

Despite some IPPs appearing to make genuine efforts to improve the lives of the low-income communities that surround their facilities, the majority of IPPs still fall victim to common the problems of a disengaged, risk-minimising, top-down way of interacting with communities, that are ineffective in terms of creating tangible improvements in well-being and doing so in ways that are likely to last. This can be attributed to creating dependencies on external parties and funding, on not engaging closely and gaining trust within communities, not collaborating with local government or business, on lack of measurement etc. The more important reason behind economic development efforts having limited positive impact is that IPPs fundamentally overlook the psychological challenges faced by the poor. The overwhelming sense of hopelessness and lack of self-belief that exists within poor communities is a psychological difficulty that is at the centre of other more apparent challenges, and has a debilitating effect on their personal development.

In Chapter 4, five 'best practice' case studies are discussed, and compared to current practice in order to extrapolate effective community development principles. Learning from these cases, it is argued that more 'meaningful' community development projects will incorporate at least three core elements.

The first is an engagement approach that puts the beneficiaries at the very centre of any development effort. This means that economic development practitioners should suspend any judgement and ideas when entering a community, and rather listen attentively, and allow ideas and solutions to emerge from the beneficiaries themselves. A deeply embedded engagement approach also allows development practitioners to understand the community and context, build strong relationships and gain trust.

The second important element is consideration of continuity of development efforts into the long term. Practitioners must consider how development efforts will continue or be maintained in their absence, and when funding from the plant is no longer

available. Adopting an enterprise mindset can support this process as it would encourage practitioners to be ‘customer’ centric, listen closely to the community’s most pressing needs and design solutions for and with them. In this way, resources are likely to follow that which communities need most, making development efforts less likely to fail, while empowering the community. In addition, enterprising approaches to community development often incorporate incentives to increase the likelihood of the development efforts lasting into the long-term.

The final element is an ecologically sustainable development trajectory, that guides what should be done, and how it should be done. Such a path aims to avoid the conventional modernisation and economic growth model, which at a community level means that each individual developmental effort should be ecologically sensitive, socially inclusive and empowering, and financially robust.

5.4 Limitations and Recommendations for Future Research

It would be plausible to argue that it is unlikely that the private sector would adopt such an approach unless it made ‘business sense’ – i.e. unless the sector incentivised or forced the deep engagement required for effective community development. This study does not explore this, and a recommendation for future studies would be to explore whether these principles would be realistic for corporates to incorporate into their CSR.

The research took place relatively early during the REIPPPP lifecycle and it is possible that energy companies and the IPP Office (that is continually seeking to improve) will quickly learn from their mistakes. However, from research findings, it is also likely that community development practices will continue along similar lines. The study is therefore limited as it only captures economic development efforts at an early stage of the REIPPPP.

As described in the research methodology section, transdisciplinary research is most suited for researchers that are able to make long-term commitments to research projects, which of course has long-term funding requirements. The author of this study was not able to make long-term time commitments due to career uncertainty. This resulted in less engagement and involvement with participants in the research setting than would be ideal.

A recommendation for future research is therefore, with an understanding of the current development trajectory in the REIPPPP, that those willing to invest a substantial amount of time into rural community development involve themselves in the setting up, or improvement, of a project or initiative according to the principles outlined in this research, with the view to both improve lives, and set a new precedent for what ‘could be’ in terms of economic development in the renewable sector. Ideally, this could be done with multiple stakeholders including the IPP, local and

national government, and possibly another party such as a corporate that requires inputs.

Taking the next step of the transdisciplinary process could have taken the form of a social enterprise that the researcher would have co-created with participants. An example of such a collaboration that integrates the three core principles outlined in this research is as follows: on the west coast of the Western Cape, there is concentration of renewable energy facilities relatively close to a fishing community where local fisherman have lost their income streams due to large companies being given preference for fishing rights. Though the job losses are not related to the REIPPPP, there is potential for IPP projects to support the community by re-energising this industry to some extent. Using funds from IPP projects, local fishermen could be equipped to supply farmed fish to these seafood companies at a fair price maintained and regulated by government. This would constitute a potentially long-lasting flow of income to local communities, causing relatively little ecological damage (depending on how it is set up), while providing meaningful jobs and restoring a sense of hope and self-empowerment. Such a project would need an independent project manager, a role that an interested transdisciplinary researcher could take on.

There are many such potential opportunities that exist throughout the country, that funding from the REIPPPP can unlock. Fundamentally, the IPP Unit has designed the programme in a way that represents a unique opportunity as it makes funding available in rural, low-income areas that are commonly economically inactive, and that have not been exposed to significant income streams. Used effectively, this funding is an opportunity to put measures in place that not only supports the long-term psychological and material wellbeing of poor communities in outlying areas, but also in a way that respects the ecological bounds of the planet.

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Appendices

Appendix A: Typical informal settlements in the Northern Cape.



Source: Author

Appendix B: A typical informal settlement in the Northern Cape



Source: Author

Appendix C: A typical smallholder or ‘opkomende’ livestock farmer in the Northern Cape



(In order to preserve anonymity, the farmer’s face has been blurred.)

Source: Author